Basic Analog Grammar

Sample Dictionary
Absolute Logical Operators

John Clark

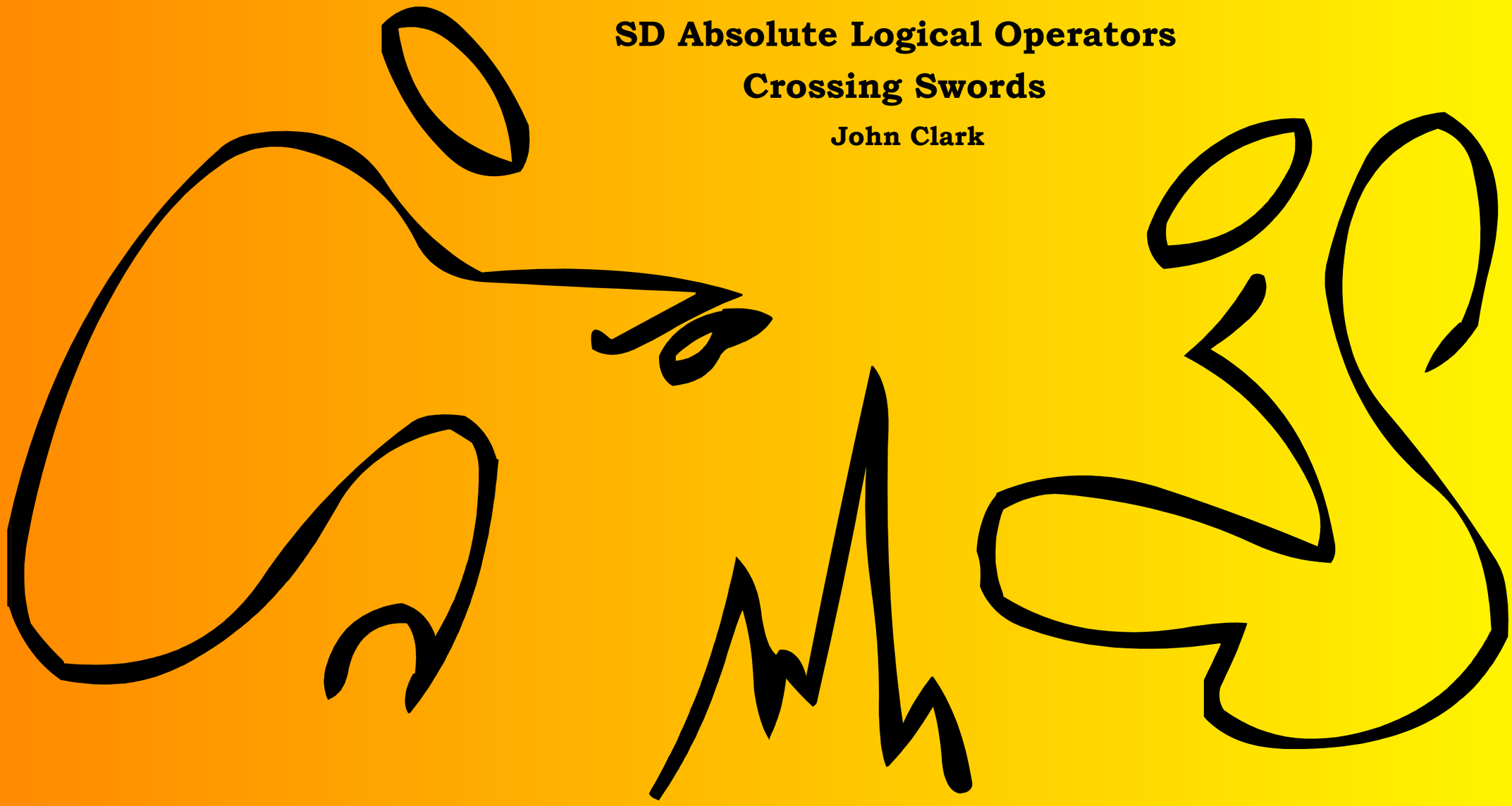
John 312

Basic Analog Grammar

SD Absolute Logical Operators

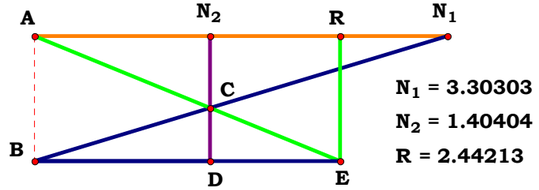
Crossing Swords

John Clark



John 312

1CST1R0



Unit. $AB := 1$ $N_u := 3$

Given. $N_1 := 3.30303$ $N_2 := 1.40404$

$A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$\frac{N_u}{B - A} = 2.442133$ $Num := \frac{N_u}{\sqrt{(N_u)^2}}$ $Den := \frac{B - A}{\sqrt{(B - A)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{N_u \cdot \sqrt{(A - B)^2}}{\sqrt{N_u^2} \cdot (B - A)} = 0$

For 2 variables there are 4 subsets.

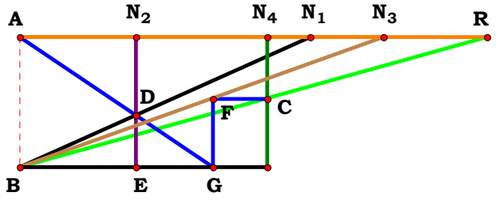
0, 0: $\mathbf{0}$

1, 0: $-\frac{\mathbf{N_u}\cdot\sqrt{(\mathbf{A}-\mathbf{1})^2}}{(\mathbf{A}-\mathbf{1})\cdot\sqrt{\mathbf{N_u}^2}}$

0, 2: $\frac{\mathbf{N_u}\cdot\sqrt{(\mathbf{B}-\mathbf{1})^2}}{(\mathbf{B}-\mathbf{1})\cdot\sqrt{\mathbf{N_u}^2}}$

1, 2: $\frac{\mathbf{N_u}\cdot\sqrt{(\mathbf{A}-\mathbf{B})^2}}{\sqrt{\mathbf{N_u}^2}\cdot(\mathbf{B}-\mathbf{A})}$

1CST1R1



$N_1 = 2.22514$
$N_2 = 0.88850$
$N_3 = 2.79164$
$N_4 = 1.89818$
$R = 3.58260$

Unit. $AB := 1$ Given. $N_1 := 2.22514$ $N_2 := .88850$ $N_3 := 2.79164$ $N_4 := 1.89818$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (B - A)}{C \cdot D} = 3.582585$$

$$Num := \frac{N_u \cdot (B - A)}{\sqrt{\left[N_u \cdot (B - A)\right]^2}}$$

$$Den := \frac{C \cdot D}{\sqrt{(C \cdot D)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{C^2 \cdot D^2} \cdot (B - A)}{C \cdot D \cdot \sqrt{N_u{}^2 \cdot (A - B)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

0, 0, 0, 4: 0

1, 0, 0, 0: $-\frac{N_u \cdot (A-1)}{\sqrt{N_u^2 \cdot (A-1)^2}}$

1, 0, 0, 4: $-\frac{N_u \cdot (A-1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (A-1)^2}}$

0, 2, 0, 0: $\frac{N_u \cdot (B-1)}{\sqrt{N_u^2 \cdot (B-1)^2}}$

0, 2, 0, 4: $\frac{N_u \cdot (B-1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (B-1)^2}}$

1, 2, 0, 0: $-\frac{N_u \cdot (A-B)}{\sqrt{N_u^2 \cdot (A-B)^2}}$

1, 2, 0, 4: $-\frac{N_u \cdot \sqrt{D^2} \cdot (A-B)}{D \cdot \sqrt{N_u^2 \cdot (A-B)^2}}$

0, 0, 3, 0: 0

0, 0, 3, 4: 0

1, 0, 3, 0: $-\frac{N_u \cdot (A-1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (A-1)^2}}$

1, 0, 3, 4: $-\frac{N_u \cdot (A-1) \cdot \sqrt{C^2 \cdot D^2}}{C \cdot D \cdot \sqrt{N_u^2 \cdot (A-1)^2}}$

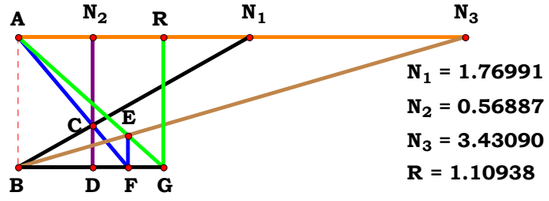
0, 2, 3, 0: $\frac{N_u \cdot (B-1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (B-1)^2}}$

0, 2, 3, 4: $\frac{N_u \cdot (B-1) \cdot \sqrt{C^2 \cdot D^2}}{C \cdot D \cdot \sqrt{N_u^2 \cdot (B-1)^2}}$

1, 2, 3, 0: $-\frac{N_u \cdot \sqrt{C^2} \cdot (A-B)}{C \cdot \sqrt{N_u^2 \cdot (A-B)^2}}$

1, 2, 3, 4: $\frac{N_u \cdot \sqrt{C^2 \cdot D^2} \cdot (B-A)}{C \cdot D \cdot \sqrt{N_u^2 \cdot (A-B)^2}}$

1CST1R3



$N_1 = 1.76991$
$N_2 = 0.56887$
$N_3 = 3.43090$
$R = 1.10938$

Unit. $AB := 1$ **Given.** $N_1 := 1.76991$ $N_2 := .56887$ $N_3 := 3.43090$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$\frac{N_u}{B - A - C} = 1.109383$ $Num := \frac{N_u}{\sqrt{(N_u)^2}}$ $Den := \frac{B - A - C}{\sqrt{(B - A - C)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{N_u \cdot \sqrt{(A - B + C)^2}}{\sqrt{N_u^2} \cdot (B - A - C)} = 0$

For 3 variables there are 8 subsets.

0, 0, 0: $$-\frac{N_u}{\sqrt{N_u^2}}$$

1, 0, 0: $$-\frac{N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2}}$$

0, 2, 0: $$\frac{N_u \cdot \sqrt{(B-2)^2}}{(B-2) \cdot \sqrt{N_u^2}}$$

1, 2, 0: $$-\frac{N_u \cdot \sqrt{(A-B+1)^2}}{\sqrt{N_u^2} \cdot (A-B+1)}$$

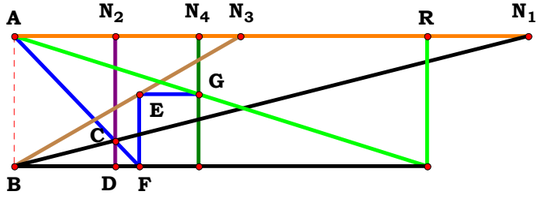
0, 0, 3: $$-\frac{N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2}}$$

1, 0, 3: $$-\frac{N_u \cdot \sqrt{(A+C-1)^2}}{\sqrt{N_u^2} \cdot (A+C-1)}$$

0, 2, 3: $$-\frac{N_u \cdot \sqrt{(C-B+1)^2}}{\sqrt{N_u^2} \cdot (C-B+1)}$$

1, 2, 3: $$\frac{N_u \cdot \sqrt{(A-B+C)^2}}{\sqrt{N_u^2} \cdot (B-A-C)}$$

1CST1R4



$N_1 = 3.93952$
$N_2 = 0.77227$
$N_3 = 1.73589$
$N_4 = 1.41390$
$R = 3.16562$

Unit. $AB := 1$ Given. $N_1 := 3.93952$ $N_2 := .77227$ $N_3 := 1.73589$ $N_4 := 1.41390$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A - B)}{D \cdot (A - B + C)} = 3.165638$$

$$Num := \frac{N_u \cdot (A - B)}{\sqrt{\left[N_u \cdot (A - B)\right]^2}}$$

$$Den := \frac{D \cdot (A - B + C)}{\sqrt{\left[D \cdot (A - B + C)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{D^2 \cdot (A - B + C)^2} \cdot (A - B)}{D \cdot \sqrt{N_u{}^2 \cdot (A - B)^2} \cdot (A - B + C)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0: $$\frac{N_u \cdot (A-1) \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u{}^2 \cdot (A-1)^2}}$$

0, 2, 0, 0: $$\frac{N_u \cdot (B-1) \cdot \sqrt{(B-2)^2}}{(B-2) \cdot \sqrt{N_u{}^2 \cdot (B-1)^2}}$$

1, 2, 0, 0: $$\frac{N_u \cdot \sqrt{(A-B+1)^2} \cdot (A-B)}{\sqrt{N_u{}^2 \cdot (A-B)^2} \cdot (A-B+1)}$$

0, 0, 3, 0: 0

1, 0, 3, 0: $$\frac{N_u \cdot (A-1) \cdot \sqrt{(A+C-1)^2}}{\sqrt{N_u{}^2 \cdot (A-1)^2} \cdot (A+C-1)}$$

0, 2, 3, 0: $$-\frac{N_u \cdot (B-1) \cdot \sqrt{(C-B+1)^2}}{\sqrt{N_u{}^2 \cdot (B-1)^2} \cdot (C-B+1)}$$

1, 2, 3, 0: $$\frac{N_u \cdot \sqrt{(A-B+C)^2} \cdot (A-B)}{\sqrt{N_u{}^2 \cdot (A-B)^2} \cdot (A-B+C)}$$

0, 0, 0, 4: 0

1, 0, 0, 4: $$\frac{N_u \cdot (A-1) \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{N_u{}^2 \cdot (A-1)^2}}$$

0, 2, 0, 4: $$\frac{N_u \cdot (B-1) \cdot \sqrt{D^2 \cdot (B-2)^2}}{D \cdot (B-2) \cdot \sqrt{N_u{}^2 \cdot (B-1)^2}}$$

1, 2, 0, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot (A-B+1)^2} \cdot (A-B)}{D \cdot \sqrt{N_u{}^2 \cdot (A-B)^2} \cdot (A-B+1)}$$

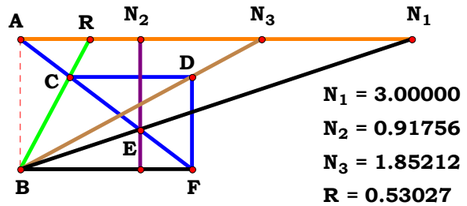
0, 0, 3, 4: 0

1, 0, 3, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot (A+C-1)^2} \cdot (A-1)}{D \cdot \sqrt{N_u{}^2 \cdot (A-1)^2} \cdot (A+C-1)}$$

0, 2, 3, 4: $$-\frac{N_u \cdot (B-1) \cdot \sqrt{D^2 \cdot (C-B+1)^2}}{D \cdot \sqrt{N_u{}^2 \cdot (B-1)^2} \cdot (C-B+1)}$$

1, 2, 3, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot (A-B+C)^2} \cdot (A-B)}{D \cdot \sqrt{N_u{}^2 \cdot (A-B)^2} \cdot (A-B+C)}$$

1CST1R5



$N_1 = 3.00000$
$N_2 = 0.91756$
$N_3 = 1.85212$
$R = 0.53027$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := .91756$ $N_3 := 1.85212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (B - A - C)}{C \cdot (B - A)} = 0.530267$$

$$Num := \frac{N_u \cdot (B - A - C)}{\sqrt{\left[N_u \cdot (B - A - C)\right]^2}}$$

$$Den := \frac{C \cdot (B - A)}{\sqrt{\left[C \cdot (B - A)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[C \cdot (B - A)\right]^2} \cdot (B - A - C)}{\sqrt{N_u{}^2 \cdot (B - A - C)^2} \cdot \left[C \cdot (B - A)\right]} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: 0

1, 0, 0: $\frac{A \cdot N_u \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{A^2 \cdot N_u{}^2}}$

0, 2, 0: $\frac{N_u \cdot (B-2) \cdot \sqrt{(B-1)^2}}{(B-1) \cdot \sqrt{N_u{}^2 \cdot (B-2)^2}}$

1, 2, 0: $\frac{N_u \cdot \sqrt{(A-B)^2} \cdot (A-B+1)}{\sqrt{N_u{}^2 \cdot (A-B+1)^2} \cdot (A-B)}$

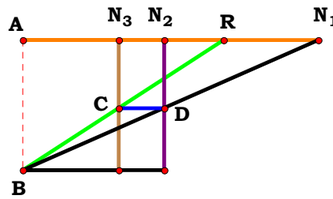
0, 0, 3: 0

1, 0, 3: $\frac{N_u \cdot \sqrt{C^2 \cdot (A-1)^2} \cdot (A+C-1)}{C \cdot \sqrt{N_u{}^2 \cdot (A+C-1)^2} \cdot (A-1)}$

0, 2, 3: $-\frac{N_u \cdot \sqrt{C^2 \cdot (B-1)^2} \cdot (C-B+1)}{C \cdot (B-1) \cdot \sqrt{N_u{}^2 \cdot (C-B+1)^2}}$

1, 2, 3: $\frac{N_u \cdot \sqrt{[C \cdot (B-A)]^2} \cdot (B-A-C)}{\sqrt{N_u{}^2 \cdot (B-A-C)^2} \cdot [C \cdot (B-A)]}$

1CST1R7



$N_1 = 2.26388$
$N_2 = 1.08221$
$N_3 = 0.73826$
$R = 1.54435$

Unit. $AB := 1$ Given. $N_1 := 2.26388$ $N_2 := 1.08221$ $N_3 := .73826$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$\frac{B \cdot N_u}{A \cdot C} = 1.544369$ $Num := \frac{B \cdot N_u}{\sqrt{(B \cdot N_u)^2}}$ $Den := \frac{A \cdot C}{\sqrt{(A \cdot C)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \sqrt{A^2 \cdot C^2}}{A \cdot C \cdot \sqrt{B^2 \cdot N_u^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0: $\frac{N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2}}$

0, 2, 0: $\frac{B \cdot N_u}{\sqrt{B^2 \cdot N_u^2}}$

1, 2, 0: $\frac{B \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{B^2 \cdot N_u^2}}$

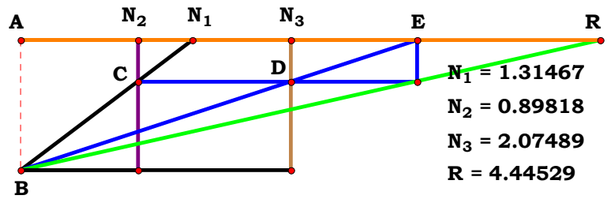
0, 0, 3: $\frac{N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2}}$

1, 0, 3: $\frac{N_u \cdot \sqrt{A^2 \cdot C^2}}{A \cdot C \cdot \sqrt{N_u^2}}$

0, 2, 3: $\frac{B \cdot N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 3: $\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot C^2}}{A \cdot C \cdot \sqrt{B^2 \cdot N_u^2}}$

1CST1R8



Unit. $AB := 1$ Given. $N_1 := 1.31467$ $N_2 := .89818$ $N_3 := 2.07489$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$\frac{B^2 \cdot N_u}{A^2 \cdot C} = 4.445308$ $Num := \frac{B^2 \cdot N_u}{\sqrt{(B^2 \cdot N_u)^2}}$ $Den := \frac{A^2 \cdot C}{\sqrt{(A^2 \cdot C)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{B^2 \cdot N_u \cdot \sqrt{A^4 \cdot C^2}}{A^2 \cdot C \cdot \sqrt{B^4 \cdot N_u^2}} = 0$

For 3 variables there are 8 subsets.

0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0: $\frac{N_u \cdot \sqrt{A^4}}{A^2 \cdot \sqrt{N_u^2}}$

0, 2, 0: $\frac{B^2 \cdot N_u}{\sqrt{B^4 \cdot N_u^2}}$

1, 2, 0: $\frac{B^2 \cdot N_u \cdot \sqrt{A^4}}{A^2 \cdot \sqrt{B^4 \cdot N_u^2}}$

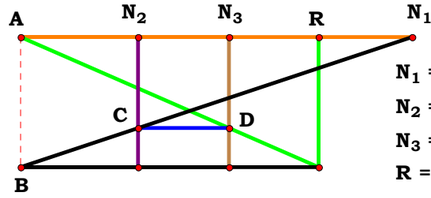
0, 0, 3: $\frac{N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2}}$

1, 0, 3: $\frac{N_u \cdot \sqrt{A^4 \cdot C^2}}{A^2 \cdot C \cdot \sqrt{N_u^2}}$

0, 2, 3: $\frac{B^2 \cdot N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{B^4 \cdot N_u^2}}$

1, 2, 3: $\frac{B^2 \cdot N_u \cdot \sqrt{A^4 \cdot C^2}}{A^2 \cdot C \cdot \sqrt{B^4 \cdot N_u^2}}$

1CST1R9



$N_1 = 3.00000$
$N_2 = 0.89818$
$N_3 = 1.60029$
$R = 2.28415$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := .89818$ $N_3 := 1.60029$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{B \cdot N_u}{C \cdot (B - A)} = 2.284149$$

$$Num := \frac{B \cdot N_u}{\sqrt{(B \cdot N_u)^2}}$$

$$Den := \frac{C \cdot (B - A)}{\sqrt{[C \cdot (B - A)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \sqrt{C^2 \cdot (A - B)^2}}{C \cdot \sqrt{B^2 \cdot N_u^2} \cdot (B - A)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: 0

1, 0, 0: $-\frac{N_u \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{N_u{}^2}}$

0, 2, 0: $\frac{B \cdot N_u \cdot \sqrt{(B-1)^2}}{(B-1) \cdot \sqrt{B^2 \cdot N_u{}^2}}$

1, 2, 0: $-\frac{B \cdot N_u \cdot \sqrt{(A-B)^2}}{\sqrt{B^2 \cdot N_u{}^2} \cdot (A-B)}$

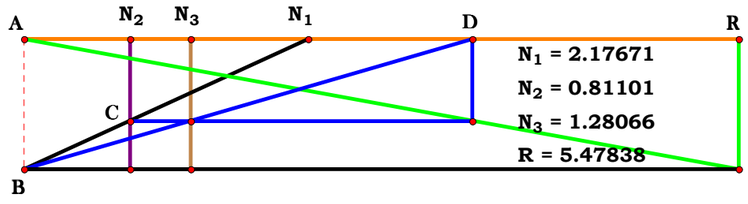
0, 0, 3: 0

1, 0, 3: $-\frac{N_u \cdot \sqrt{C^2 \cdot (A-1)^2}}{C \cdot (A-1) \cdot \sqrt{N_u{}^2}}$

0, 2, 3: $\frac{B \cdot N_u \cdot \sqrt{C^2 \cdot (B-1)^2}}{C \cdot (B-1) \cdot \sqrt{B^2 \cdot N_u{}^2}}$

1, 2, 3: $\frac{B \cdot N_u \cdot \sqrt{C^2 \cdot (A-B)^2}}{C \cdot \sqrt{B^2 \cdot N_u{}^2} \cdot (B-A)}$

1CST1R10



Unit. $AB := 1$ Given. $N_1 := 2.17671$ $N_2 := .81101$ $N_3 := 1.28066$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{B^2 \cdot N_u}{C \cdot \left(A \cdot B - A^2\right)} = 5.478397$$

$$Num := \frac{B^2 \cdot N_u}{\sqrt{\left(B^2 \cdot N_u\right)^2}}$$

$$Den := \frac{C \cdot \left(A \cdot B - A^2\right)}{\sqrt{\left[C \cdot \left(A \cdot B - A^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B^2 \cdot N_u \cdot \sqrt{C^2 \cdot \left(A^2 - A \cdot B\right)^2}}{A \cdot C \cdot \sqrt{B^4 \cdot N_u{}^2} \cdot (B - A)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: 0

1, 0, 0: $-\frac{N_u \cdot \sqrt{\left(A - A^2\right)^2}}{A \cdot (A-1) \cdot \sqrt{N_u{}^2}}$

0, 2, 0: $\frac{B^2 \cdot N_u \cdot \sqrt{(B-1)^2}}{(B-1) \cdot \sqrt{B^4 \cdot N_u{}^2}}$

1, 2, 0: $-\frac{B^2 \cdot N_u \cdot \sqrt{\left(A^2 - A \cdot B\right)^2}}{A \cdot \sqrt{B^4 \cdot N_u{}^2} \cdot (A-B)}$

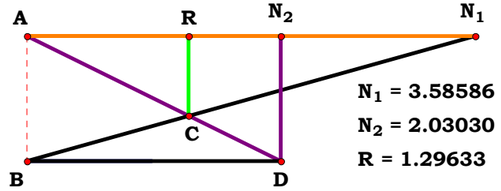
0, 0, 3: 0

1, 0, 3: $-\frac{N_u \cdot \sqrt{C^2 \cdot \left(A - A^2\right)^2}}{A \cdot C \cdot (A-1) \cdot \sqrt{N_u{}^2}}$

0, 2, 3: $\frac{B^2 \cdot N_u \cdot \sqrt{C^2 \cdot (B-1)^2}}{C \cdot (B-1) \cdot \sqrt{B^4 \cdot N_u{}^2}}$

1, 2, 3: $\frac{B^2 \cdot N_u \cdot \sqrt{C^2 \cdot \left(A^2 - A \cdot B\right)^2}}{A \cdot C \cdot \sqrt{B^4 \cdot N_u{}^2} \cdot (B-A)}$

1CST2R0



Unit. $AB := 1$ Given. $N_1 := 3.58586$ $N_2 := 2.03030$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$\frac{N_u}{A+B} = 1.296326$ $Num := \frac{N_u}{\sqrt{(N_u)^2}}$ $Den := \frac{A+B}{\sqrt{(A+B)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{(A+B)^2}}{\sqrt{N_u^2} \cdot (A+B)} = 0$$

For 2 variables there are 4 subsets.

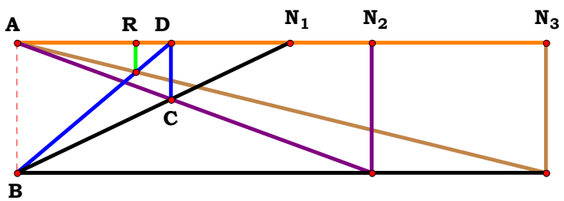
0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0: $\frac{N_u \cdot \sqrt{(A+1)^2}}{(A+1) \cdot \sqrt{N_u^2}}$

0, 2: $\frac{N_u \cdot \sqrt{(B+1)^2}}{(B+1) \cdot \sqrt{N_u^2}}$

1, 2: $\frac{N_u \cdot \sqrt{(A+B)^2}}{\sqrt{N_u^2} \cdot (A+B)}$

1CST2R1



$N_1 = 2.08954$

$N_2 = 2.71911$

$N_3 = 4.06048$

$R = 0.91523$

Unit. $AB := 1$ **Given.** $N_1 := 2.08954$ $N_2 := 2.71911$ $N_3 := 4.06048$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$\frac{N_u}{A+B+C} = 0.915233$ $Num := \frac{N_u}{\sqrt{(N_u)^2}}$ $Den := \frac{A+B+C}{\sqrt{(A+B+C)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{N_u \cdot \sqrt{(A+B+C)^2}}{\sqrt{N_u{}^2} \cdot (A+B+C)} = 0$

For 3 variables there are 8 subsets.

0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0: $\frac{N_u \cdot \sqrt{(A+2)^2}}{(A+2) \cdot \sqrt{N_u^2}}$

0, 2, 0: $\frac{N_u \cdot \sqrt{(B+2)^2}}{(B+2) \cdot \sqrt{N_u^2}}$

1, 2, 0: $\frac{N_u \cdot \sqrt{(A+B+1)^2}}{\sqrt{N_u^2} \cdot (A+B+1)}$

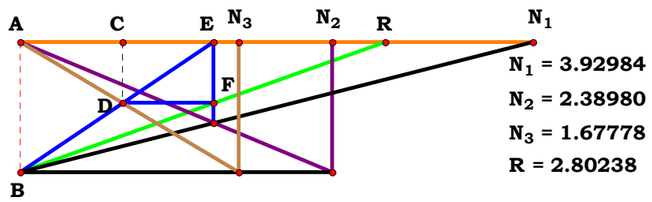
0, 0, 3: $\frac{N_u \cdot \sqrt{(C+2)^2}}{(C+2) \cdot \sqrt{N_u^2}}$

1, 0, 3: $\frac{N_u \cdot \sqrt{(A+C+1)^2}}{\sqrt{N_u^2} \cdot (A+C+1)}$

0, 2, 3: $\frac{N_u \cdot \sqrt{(B+C+1)^2}}{\sqrt{N_u^2} \cdot (B+C+1)}$

1, 2, 3: $\frac{N_u \cdot \sqrt{(A+B+C)^2}}{\sqrt{N_u^2} \cdot (A+B+C)}$

1CST2R2



$N_1 = 3.92984$

$N_2 = 2.38980$

$N_3 = 1.67778$

$R = 2.80238$

Unit. $AB := 1$ **Given.** $N_1 := 3.92984$ $N_2 := 2.38980$ $N_3 := 1.67778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (A + B + C)}{(A + B)^2} = 2.802381$$

$$Num := \frac{N_u \cdot (A + B + C)}{\sqrt{\left[N_u \cdot (A + B + C)\right]^2}}$$

$$Den := \frac{(A + B)^2}{\sqrt{\left[(A + B)^2\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{(A + B)^4} \cdot (A + B + C)}{\sqrt{N_u^2 \cdot (A + B + C)^2} \cdot (A + B)^2} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u}{\sqrt{N_u^{\,2}}}$$

1, 0, 0: $$\frac{N_u \cdot (A+2) \cdot \sqrt{(A+1)^4}}{(A+1)^2 \cdot \sqrt{N_u^{\,2} \cdot (A+2)^2}}$$

0, 2, 0: $$\frac{N_u \cdot (B+2) \cdot \sqrt{(B+1)^4}}{(B+1)^2 \cdot \sqrt{N_u^{\,2} \cdot (B+2)^2}}$$

1, 2, 0: $$\frac{N_u \cdot \sqrt{(A+B)^4} \cdot (A+B+1)}{\sqrt{N_u^{\,2} \cdot (A+B+1)^2} \cdot (A+B)^2}$$

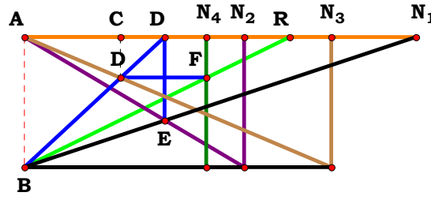
0, 0, 3: $$\frac{N_u \cdot (C+2)}{\sqrt{N_u^{\,2} \cdot (C+2)^2}}$$

1, 0, 3: $$\frac{N_u \cdot \sqrt{(A+1)^4} \cdot (A+C+1)}{\sqrt{N_u^{\,2} \cdot (A+C+1)^2} \cdot (A+1)^2}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{(B+1)^4} \cdot (B+C+1)}{\sqrt{N_u^{\,2} \cdot (B+C+1)^2} \cdot (B+1)^2}$$

1, 2, 3: $$\frac{N_u \cdot \sqrt{(A+B)^4} \cdot (A+B+C)}{\sqrt{N_u^{\,2} \cdot (A+B+C)^2} \cdot (A+B)^2}$$

1CST2R3



$N_1 = 3.00000$
$N_2 = 1.68273$
$N_3 = 2.35578$
$N_4 = 1.39452$
$R = 2.03268$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 1.68273$ $N_3 := 2.35578$ $N_4 := 1.39452$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A + B + C)}{D \cdot (A + B)} = 2.032676$$

$$Num := \frac{N_u \cdot (A + B + C)}{\sqrt{\left[N_u \cdot (A + B + C)\right]^2}}$$

$$Den := \frac{D \cdot (A + B)}{\sqrt{\left[D \cdot (A + B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{D^2 \cdot (A + B)^2} \cdot (A + B + C)}{D \cdot \sqrt{N_u^2 \cdot (A + B + C)^2} \cdot (A + B)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $$\frac{N_u}{\sqrt{N_u^{\,2}}}$$

1, 0, 0, 0: $$\frac{N_u \cdot (A+2) \cdot \sqrt{(A+1)^2}}{(A+1) \cdot \sqrt{N_u^{\,2} \cdot (A+2)^2}}$$

0, 2, 0, 0: $$\frac{N_u \cdot (B+2) \cdot \sqrt{(B+1)^2}}{(B+1) \cdot \sqrt{N_u^{\,2} \cdot (B+2)^2}}$$

1, 2, 0, 0: $$\frac{N_u \cdot \sqrt{(A+B)^2} \cdot (A+B+1)}{\sqrt{N_u^{\,2} \cdot (A+B+1)^2} \cdot (A+B)}$$

0, 0, 3, 0: $$\frac{N_u \cdot (C+2)}{\sqrt{N_u^{\,2} \cdot (C+2)^2}}$$

1, 0, 3, 0: $$\frac{N_u \cdot \sqrt{(A+1)^2} \cdot (A+C+1)}{\sqrt{N_u^{\,2} \cdot (A+C+1)^2} \cdot (A+1)}$$

0, 2, 3, 0: $$\frac{N_u \cdot \sqrt{(B+1)^2} \cdot (B+C+1)}{\sqrt{N_u^{\,2} \cdot (B+C+1)^2} \cdot (B+1)}$$

1, 2, 3, 0: $$\frac{N_u \cdot \sqrt{(A+B)^2} \cdot (A+B+C)}{\sqrt{N_u^{\,2} \cdot (A+B+C)^2} \cdot (A+B)}$$

0, 0, 0, 4: $$\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^{\,2}}}$$

1, 0, 0, 4: $$\frac{N_u \cdot (A+2) \cdot \sqrt{D^2 \cdot (A+1)^2}}{D \cdot (A+1) \cdot \sqrt{N_u^{\,2} \cdot (A+2)^2}}$$

0, 2, 0, 4: $$\frac{N_u \cdot (B+2) \cdot \sqrt{D^2 \cdot (B+1)^2}}{D \cdot (B+1) \cdot \sqrt{N_u^{\,2} \cdot (B+2)^2}}$$

1, 2, 0, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot (A+B)^2} \cdot (A+B+1)}{D \cdot \sqrt{N_u^{\,2} \cdot (A+B+1)^2} \cdot (A+B)}$$

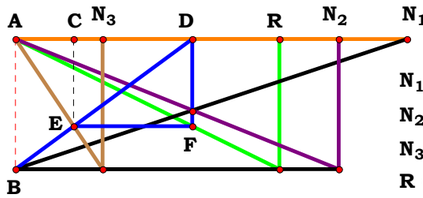
0, 0, 3, 4: $$\frac{N_u \cdot (C+2) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^{\,2} \cdot (C+2)^2}}$$

1, 0, 3, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot (A+1)^2} \cdot (A+C+1)}{D \cdot \sqrt{N_u^{\,2} \cdot (A+C+1)^2} \cdot (A+1)}$$

0, 2, 3, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot (B+1)^2} \cdot (B+C+1)}{D \cdot \sqrt{N_u^{\,2} \cdot (B+C+1)^2} \cdot (B+1)}$$

1, 2, 3, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot (A+B)^2} \cdot (A+B+C)}{D \cdot \sqrt{N_u^{\,2} \cdot (A+B+C)^2} \cdot (A+B)}$$

1CST2R4



$N_1 = 3.00000$
$N_2 = 2.47697$
$N_3 = 0.67045$
$R = 2.02721$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 2.47697$ $N_3 := .67045$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (A + B + C)}{C \cdot (A + B)} = 2.027206$$

$$Num := \frac{N_u \cdot (A + B + C)}{\sqrt{\left[N_u \cdot (A + B + C)\right]^2}}$$

$$Den := \frac{C \cdot (A + B)}{\sqrt{\left[C \cdot (A + B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{C^2 \cdot (A + B)^2} \cdot (A + B + C)}{C \cdot \sqrt{N_u{}^2 \cdot (A + B + C)^2} \cdot (A + B)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u}{\sqrt{N_u^{\,2}}}$$

1, 0, 0: $$\frac{N_u \cdot (A+2) \cdot \sqrt{(A+1)^2}}{(A+1) \cdot \sqrt{N_u^{\,2} \cdot (A+2)^2}}$$

0, 2, 0: $$\frac{N_u \cdot (B+2) \cdot \sqrt{(B+1)^2}}{(B+1) \cdot \sqrt{N_u^{\,2} \cdot (B+2)^2}}$$

1, 2, 0: $$\frac{N_u \cdot \sqrt{(A+B)^2} \cdot (A+B+1)}{\sqrt{N_u^{\,2} \cdot (A+B+1)^2} \cdot (A+B)}$$

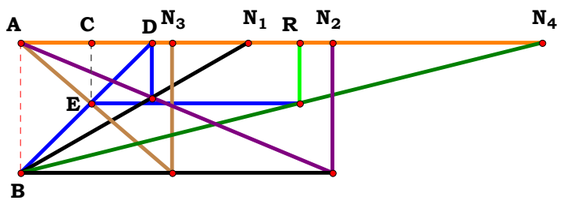
0, 0, 3: $$\frac{N_u \cdot (C+2) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^{\,2} \cdot (C+2)^2}}$$

1, 0, 3: $$\frac{N_u \cdot \sqrt{C^2 \cdot (A+1)^2} \cdot (A+C+1)}{C \cdot \sqrt{N_u^{\,2} \cdot (A+C+1)^2} \cdot (A+1)}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{C^2 \cdot (B+1)^2} \cdot (B+C+1)}{C \cdot \sqrt{N_u^{\,2} \cdot (B+C+1)^2} \cdot (B+1)}$$

1, 2, 3: $$\frac{N_u \cdot \sqrt{C^2 \cdot (A+B)^2} \cdot (A+B+C)}{C \cdot \sqrt{N_u^{\,2} \cdot (A+B+C)^2} \cdot (A+B)}$$

1CST2R5



$N_1 = 1.74085$
$N_2 = 2.38980$
$N_3 = 1.16443$
$N_4 = 4.00000$
$R = 2.14483$

Unit. $AB := 1$ **Given.** $N_1 := 1.74085$ $N_2 := 2.38980$ $N_3 := 1.16443$ $N_4 := 4$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A + B)}{D \cdot (A + B + C)} = 2.144829$$

$$Num := \frac{N_u \cdot (A + B)}{\sqrt{\left[N_u \cdot (A + B)\right]^2}}$$

$$Den := \frac{D \cdot (A + B + C)}{\sqrt{\left[D \cdot (A + B + C)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{D^2 \cdot (A + B + C)^2} \cdot (A + B)}{D \cdot \sqrt{N_u{}^2 \cdot (A + B)^2} \cdot (A + B + C)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\dfrac{N_u}{\sqrt{N_u^{\,2}}}$

0, 0, 0, 4: $\dfrac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^{\,2}}}$

1, 0, 0, 0: $\dfrac{N_u \cdot (A+1) \cdot \sqrt{(A+2)^2}}{(A+2) \cdot \sqrt{N_u^{\,2} \cdot (A+1)^2}}$

1, 0, 0, 4: $\dfrac{N_u \cdot (A+1) \cdot \sqrt{D^2 \cdot (A+2)^2}}{D \cdot (A+2) \cdot \sqrt{N_u^{\,2} \cdot (A+1)^2}}$

0, 2, 0, 0: $\dfrac{N_u \cdot (B+1) \cdot \sqrt{(B+2)^2}}{(B+2) \cdot \sqrt{N_u^{\,2} \cdot (B+1)^2}}$

0, 2, 0, 4: $\dfrac{N_u \cdot (B+1) \cdot \sqrt{D^2 \cdot (B+2)^2}}{D \cdot (B+2) \cdot \sqrt{N_u^{\,2} \cdot (B+1)^2}}$

1, 2, 0, 0: $\dfrac{N_u \cdot (A+B) \cdot \sqrt{(A+B+1)^2}}{\sqrt{N_u^{\,2} \cdot (A+B)^2} \cdot (A+B+1)}$

1, 2, 0, 4: $\dfrac{N_u \cdot \sqrt{D^2 \cdot (A+B+1)^2} \cdot (A+B)}{D \cdot \sqrt{N_u^{\,2} \cdot (A+B)^2} \cdot (A+B+1)}$

0, 0, 3, 0: $\dfrac{N_u \cdot \sqrt{(C+2)^2}}{(C+2) \cdot \sqrt{N_u^{\,2}}}$

0, 0, 3, 4: $\dfrac{N_u \cdot \sqrt{D^2 \cdot (C+2)^2}}{D \cdot (C+2) \cdot \sqrt{N_u^{\,2}}}$

1, 0, 3, 0: $\dfrac{N_u \cdot (A+1) \cdot \sqrt{(A+C+1)^2}}{\sqrt{N_u^{\,2} \cdot (A+1)^2} \cdot (A+C+1)}$

1, 0, 3, 4: $\dfrac{N_u \cdot \sqrt{D^2 \cdot (A+C+1)^2} \cdot (A+1)}{D \cdot \sqrt{N_u^{\,2} \cdot (A+1)^2} \cdot (A+C+1)}$

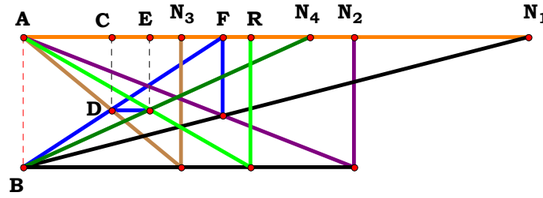
0, 2, 3, 0: $\dfrac{N_u \cdot (B+1) \cdot \sqrt{(B+C+1)^2}}{\sqrt{N_u^{\,2} \cdot (B+1)^2} \cdot (B+C+1)}$

0, 2, 3, 4: $\dfrac{N_u \cdot \sqrt{D^2 \cdot (B+C+1)^2} \cdot (B+1)}{D \cdot \sqrt{N_u^{\,2} \cdot (B+1)^2} \cdot (B+C+1)}$

1, 2, 3, 0: $\dfrac{N_u \cdot \sqrt{(A+B+C)^2} \cdot (A+B)}{\sqrt{N_u^{\,2} \cdot (A+B)^2} \cdot (A+B+C)}$

1, 2, 3, 4: $\dfrac{N_u \cdot \sqrt{D^2 \cdot (A+B+C)^2} \cdot (A+B)}{D \cdot \sqrt{N_u^{\,2} \cdot (A+B)^2} \cdot (A+B+C)}$

1CST2R6



$N_1 = 3.87172$
$N_2 = 2.53508$
$N_3 = 1.21286$
$N_4 = 2.19844$
$R = 1.74049$

Unit. $AB := 1$ Given. $N_1 := 3.87172$ $N_2 := 2.53508$ $N_3 := 1.21286$ $N_4 := 2.19844$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A + B)}{C \cdot D} = 1.740487 \qquad Num := \frac{N_u \cdot (A + B)}{\sqrt{\left[N_u \cdot (A + B)\right]^2}} \qquad Den := \frac{C \cdot D}{\sqrt{(C \cdot D)^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{C^2 \cdot D^2} \cdot (A + B)}{C \cdot D \cdot \sqrt{N_u^2 \cdot (A + B)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0: $\frac{N_u \cdot (A+1)}{\sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 0, 0: $\frac{N_u \cdot (B+1)}{\sqrt{N_u^2 \cdot (B+1)^2}}$

1, 2, 0, 0: $\frac{N_u \cdot (A+B)}{\sqrt{N_u^2 \cdot (A+B)^2}}$

0, 0, 3, 0: $\frac{N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2}}$

1, 0, 3, 0: $\frac{N_u \cdot (A+1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 3, 0: $\frac{N_u \cdot (B+1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (B+1)^2}}$

1, 2, 3, 0: $\frac{N_u \cdot \sqrt{C^2} \cdot (A+B)}{C \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$

0, 0, 0, 4: $\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2}}$

1, 0, 0, 4: $\frac{N_u \cdot (A+1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 0, 4: $\frac{N_u \cdot (B+1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (B+1)^2}}$

1, 2, 0, 4: $\frac{N_u \cdot \sqrt{D^2} \cdot (A+B)}{D \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$

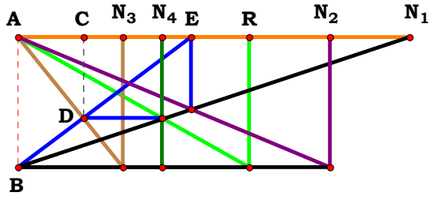
0, 0, 3, 4: $\frac{N_u \cdot \sqrt{C^2 \cdot D^2}}{C \cdot D \cdot \sqrt{N_u^2}}$

1, 0, 3, 4: $\frac{N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot D^2}}{C \cdot D \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 3, 4: $\frac{N_u \cdot (B+1) \cdot \sqrt{C^2 \cdot D^2}}{C \cdot D \cdot \sqrt{N_u^2 \cdot (B+1)^2}}$

1, 2, 3, 4: $\frac{N_u \cdot \sqrt{C^2 \cdot D^2} \cdot (A+B)}{C \cdot D \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$

1CST2R7



$N_1 = 3.00000$
$N_2 = 2.38980$
$N_3 = 0.80606$
$N_4 = 1.10395$
$R = 1.77292$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 2.3898$ $N_3 := .80606$ $N_4 := 1.10395$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A + B + C)}{C \cdot D} = 1.77292$$

$$Num := \frac{N_u \cdot (A + B + C)}{\sqrt{\left[N_u \cdot (A + B + C)\right]^2}}$$

$$Den := \frac{C \cdot D}{\sqrt{(C \cdot D)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{C^2 \cdot D^2} \cdot (A + B + C)}{C \cdot D \cdot \sqrt{N_u{}^2 \cdot (A + B + C)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

0, 0, 0, 4: $\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2}}$

1, 0, 0, 0: $\frac{N_u \cdot (A+2)}{\sqrt{N_u^2 \cdot (A+2)^2}}$

1, 0, 0, 4: $\frac{N_u \cdot (A+2) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (A+2)^2}}$

0, 2, 0, 0: $\frac{N_u \cdot (B+2)}{\sqrt{N_u^2 \cdot (B+2)^2}}$

0, 2, 0, 4: $\frac{N_u \cdot (B+2) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (B+2)^2}}$

1, 2, 0, 0: $\frac{N_u \cdot (A+B+1)}{\sqrt{N_u^2 \cdot (A+B+1)^2}}$

1, 2, 0, 4: $\frac{N_u \cdot \sqrt{D^2} \cdot (A+B+1)}{D \cdot \sqrt{N_u^2 \cdot (A+B+1)^2}}$

0, 0, 3, 0: $\frac{N_u \cdot (C+2) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (C+2)^2}}$

0, 0, 3, 4: $\frac{N_u \cdot (C+2) \cdot \sqrt{C^2 \cdot D^2}}{C \cdot D \cdot \sqrt{N_u^2 \cdot (C+2)^2}}$

1, 0, 3, 0: $\frac{N_u \cdot \sqrt{C^2} \cdot (A+C+1)}{C \cdot \sqrt{N_u^2 \cdot (A+C+1)^2}}$

1, 0, 3, 4: $\frac{N_u \cdot \sqrt{C^2 \cdot D^2} \cdot (A+C+1)}{C \cdot D \cdot \sqrt{N_u^2 \cdot (A+C+1)^2}}$

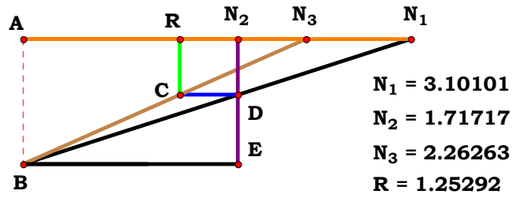
0, 2, 3, 0: $\frac{N_u \cdot \sqrt{C^2} \cdot (B+C+1)}{C \cdot \sqrt{N_u^2 \cdot (B+C+1)^2}}$

0, 2, 3, 4: $\frac{N_u \cdot \sqrt{C^2 \cdot D^2} \cdot (B+C+1)}{C \cdot D \cdot \sqrt{N_u^2 \cdot (B+C+1)^2}}$

1, 2, 3, 0: $\frac{N_u \cdot \sqrt{C^2} \cdot (A+B+C)}{C \cdot \sqrt{N_u^2 \cdot (A+B+C)^2}}$

1, 2, 3, 4: $\frac{N_u \cdot \sqrt{C^2 \cdot D^2} \cdot (A+B+C)}{C \cdot D \cdot \sqrt{N_u^2 \cdot (A+B+C)^2}}$

1CST3R0



Unit. $AB := 1$ **Given.** $N_1 := 3.10101$ $N_2 := 2.26263$ $N_3 := 1.71717$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$\frac{A \cdot N_u}{B \cdot C} = 1.252921$ $Num := \frac{A \cdot N_u}{\sqrt{(A \cdot N_u)^2}}$ $Den := \frac{B \cdot C}{\sqrt{(B \cdot C)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{A \cdot N_u \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{A^2 \cdot N_u{}^2}} = 0$

For 3 variables there are 8 subsets.

0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0: $\frac{A \cdot N_u}{\sqrt{A^2 \cdot N_u^2}}$

0, 2, 0: $\frac{N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2}}$

1, 2, 0: $\frac{A \cdot N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{A^2 \cdot N_u^2}}$

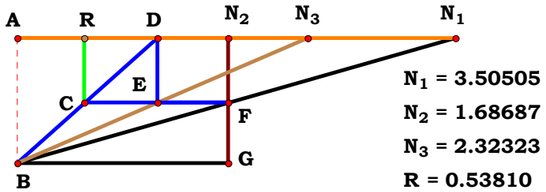
0, 0, 3: $\frac{N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2}}$

1, 0, 3: $\frac{A \cdot N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{A^2 \cdot N_u^2}}$

0, 2, 3: $\frac{N_u \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{N_u^2}}$

1, 2, 3: $\frac{A \cdot N_u \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{A^2 \cdot N_u^2}}$

1CST3R1



Unit. $AB := 1$ Given. $N_1 := 3.50505$ $N_2 := 1.68687$ $N_3 := 2.32323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$\frac{A^2 \cdot N_u}{B^2 \cdot C} = 0.538105$ $Num := \frac{A^2 \cdot N_u}{\sqrt{(A^2 \cdot N_u)^2}}$ $Den := \frac{B^2 \cdot C}{\sqrt{(B^2 \cdot C)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{A^2 \cdot N_u \cdot \sqrt{B^4 \cdot C^2}}{B^2 \cdot C \cdot \sqrt{A^4 \cdot N_u^2}} = 0$

For 3 variables there are 8 subsets.

0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0: $\frac{A^2 \cdot N_u}{\sqrt{A^4 \cdot N_u^2}}$

0, 2, 0: $\frac{N_u \cdot \sqrt{B^4}}{B^2 \cdot \sqrt{N_u^2}}$

1, 2, 0: $\frac{A^2 \cdot N_u \cdot \sqrt{B^4}}{B^2 \cdot \sqrt{A^4 \cdot N_u^2}}$

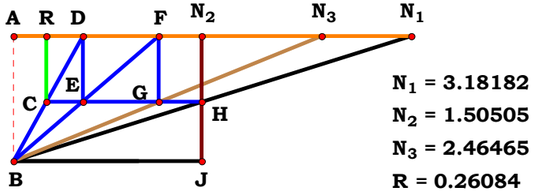
0, 0, 3: $\frac{N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2}}$

1, 0, 3: $\frac{A^2 \cdot N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{A^4 \cdot N_u^2}}$

0, 2, 3: $\frac{N_u \cdot \sqrt{B^4 \cdot C^2}}{B^2 \cdot C \cdot \sqrt{N_u^2}}$

1, 2, 3: $\frac{A^2 \cdot N_u \cdot \sqrt{B^4 \cdot C^2}}{B^2 \cdot C \cdot \sqrt{A^4 \cdot N_u^2}}$

1CST3R2



$N_1 = 3.18182$
$N_2 = 1.50505$
$N_3 = 2.46465$
$R = 0.26084$

Unit. $AB := 1$ **Given.** $N_1 := 3.18182$ $N_2 := 1.50505$ $N_3 := 2.46465$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$\frac{A^3 \cdot N_u}{B^3 \cdot C} = 0.260844$ $Num := \frac{A^3 \cdot N_u}{\sqrt{(A^3 \cdot N_u)^2}}$ $Den := \frac{B^3 \cdot C}{\sqrt{(B^3 \cdot C)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^3 \cdot N_u \cdot \sqrt{B^6 \cdot C^2}}{B^3 \cdot C \cdot \sqrt{A^6 \cdot N_u^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0: $\frac{A^3 \cdot N_u}{\sqrt{A^6 \cdot N_u^2}}$

0, 2, 0: $\frac{N_u \cdot \sqrt{B^6}}{B^3 \cdot \sqrt{N_u^2}}$

1, 2, 0: $\frac{A^3 \cdot N_u \cdot \sqrt{B^6}}{B^3 \cdot \sqrt{A^6 \cdot N_u^2}}$

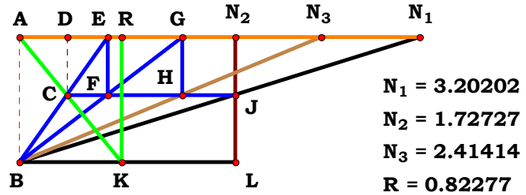
0, 0, 3: $\frac{N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2}}$

1, 0, 3: $\frac{A^3 \cdot N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{A^6 \cdot N_u^2}}$

0, 2, 3: $\frac{N_u \cdot \sqrt{B^6 \cdot C^2}}{B^3 \cdot C \cdot \sqrt{N_u^2}}$

1, 2, 3: $\frac{A^3 \cdot N_u \cdot \sqrt{B^6 \cdot C^2}}{B^3 \cdot C \cdot \sqrt{A^6 \cdot N_u^2}}$

1CST3R3



$N_1 = 3.20202$
$N_2 = 1.72727$
$N_3 = 2.41414$
$R = 0.82277$

Unit. $AB := 1$ **Given.** $N_1 := 3.20202$ $N_2 := 1.72727$ $N_3 := 2.41414$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A^3 \cdot N_u}{B^2 \cdot C \cdot (B - A)} = 0.822767$$

$$Num := \frac{A^3 \cdot N_u}{\sqrt{\left(A^3 \cdot N_u\right)^2}}$$

$$Den := \frac{B^2 \cdot C \cdot (B - A)}{\sqrt{\left[B^2 \cdot C \cdot (B - A)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^3 \cdot N_u \cdot \sqrt{B^4 \cdot C^2 \cdot (A - B)^2}}{B^2 \cdot C \cdot \sqrt{A^6 \cdot {N_u}^2} \cdot (B - A)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: 0

1, 0, 0: $-\frac{A^3 \cdot N_u \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{A^6 \cdot N_u{}^2}}$

0, 2, 0: $\frac{N_u \cdot \sqrt{B^4 \cdot (B-1)^2}}{B^2 \cdot (B-1) \cdot \sqrt{N_u{}^2}}$

1, 2, 0: $-\frac{A^3 \cdot N_u \cdot \sqrt{B^4 \cdot (A-B)^2}}{B^2 \cdot \sqrt{A^6 \cdot N_u{}^2} \cdot (A-B)}$

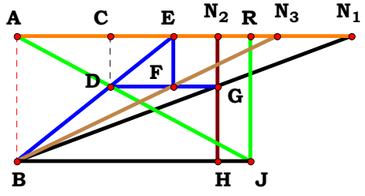
0, 0, 3: 0

1, 0, 3: $-\frac{A^3 \cdot N_u \cdot \sqrt{C^2 \cdot (A-1)^2}}{C \cdot (A-1) \cdot \sqrt{A^6 \cdot N_u{}^2}}$

0, 2, 3: $\frac{N_u \cdot \sqrt{B^4 \cdot C^2 \cdot (B-1)^2}}{B^2 \cdot C \cdot (B-1) \cdot \sqrt{N_u{}^2}}$

1, 2, 3: $\frac{A^3 \cdot N_u \cdot \sqrt{B^4 \cdot C^2 \cdot (A-B)^2}}{B^2 \cdot C \cdot \sqrt{A^6 \cdot N_u{}^2} \cdot (B-A)}$

1CST3R4



$N_1 = 2.67677$

$N_2 = 1.60606$

$N_3 = 2.08081$

$R = 1.87273$

Unit. $AB := 1$ Given. $N_1 := 2.67677$ $N_2 := 1.60606$ $N_3 := 2.08081$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A^2 \cdot N_u}{C \cdot \left(B^2 - A \cdot B\right)} = 1.872721$$

$$Num := \frac{A^2 \cdot N_u}{\sqrt{\left(A^2 \cdot N_u\right)^2}}$$

$$Den := \frac{C \cdot \left(B^2 - A \cdot B\right)}{\sqrt{\left[C \cdot \left(B^2 - A \cdot B\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^2 \cdot N_u \cdot \sqrt{C^2 \cdot \left(B^2 - A \cdot B\right)^2}}{B \cdot C \cdot \sqrt{A^4 \cdot N_u{}^2} \cdot (B - A)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: **0**

1, 0, 0: $$-\frac{A^2 \cdot N_u \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{A^4 \cdot N_u{}^2}}$$

0, 2, 0: $$\frac{N_u \cdot \sqrt{\left(B-B^2\right)^2}}{B \cdot (B-1) \cdot \sqrt{N_u{}^2}}$$

1, 2, 0: $$-\frac{A^2 \cdot N_u \cdot \sqrt{\left(B^2-A \cdot B\right)^2}}{B \cdot \sqrt{A^4 \cdot N_u{}^2} \cdot (A-B)}$$

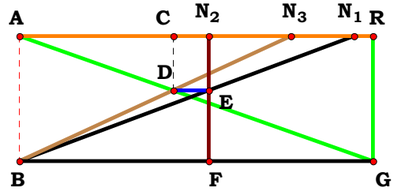
0, 0, 3: **0**

1, 0, 3: $$-\frac{A^2 \cdot N_u \cdot \sqrt{C^2 \cdot (A-1)^2}}{C \cdot (A-1) \cdot \sqrt{A^4 \cdot N_u{}^2}}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{C^2 \cdot \left(B-B^2\right)^2}}{B \cdot C \cdot (B-1) \cdot \sqrt{N_u{}^2}}$$

1, 2, 3: $$\frac{A^2 \cdot N_u \cdot \sqrt{C^2 \cdot \left(B^2-A \cdot B\right)^2}}{B \cdot C \cdot \sqrt{A^4 \cdot N_u{}^2} \cdot (B-A)}$$

1CST3R5



$N_1 = 2.67677$
$N_2 = 1.51515$
$N_3 = 2.17172$
$R = 2.83267$

Unit. $AB := 1$ **Given.** $N_1 := 2.67677$ $N_2 := 1.51515$ $N_3 := 2.17172$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$\frac{A \cdot N_u}{C \cdot (B - A)} = 2.832666$ $Num := \frac{A \cdot N_u}{\sqrt{(A \cdot N_u)^2}}$ $Den := \frac{C \cdot (B - A)}{\sqrt{[C \cdot (B - A)]^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{C^2 \cdot (A - B)^2}}{C \cdot \sqrt{A^2 \cdot N_u{}^2} \cdot (B - A)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: **0**

1, 0, 0: $$-\frac{A \cdot N_u \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{A^2 \cdot N_u{}^2}}$$

0, 2, 0: $$\frac{N_u \cdot \sqrt{(B-1)^2}}{(B-1) \cdot \sqrt{N_u{}^2}}$$

1, 2, 0: $$-\frac{A \cdot N_u \cdot \sqrt{(A-B)^2}}{\sqrt{A^2 \cdot N_u{}^2} \cdot (A-B)}$$

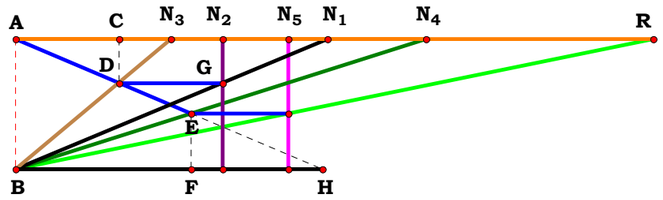
0, 0, 3: **0**

1, 0, 3: $$-\frac{A \cdot N_u \cdot \sqrt{C^2 \cdot (A-1)^2}}{C \cdot (A-1) \cdot \sqrt{A^2 \cdot N_u{}^2}}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{C^2 \cdot (B-1)^2}}{C \cdot (B-1) \cdot \sqrt{N_u{}^2}}$$

1, 2, 3: $$\frac{A \cdot N_u \cdot \sqrt{C^2 \cdot (A-B)^2}}{C \cdot \sqrt{A^2 \cdot N_u{}^2} \cdot (B-A)}$$

1CST3R6



$N_1 = 2.38980$
$N_2 = 1.58588$
$N_3 = 1.19349$
$N_4 = 3.14765$
$N_5 = 2.09213$
$R = 4.88919$

Unit. $AB := 1$ Given. $N_1 := 2.38980$ $N_2 := 1.58588$ $N_3 := 1.19349$

$N_4 := 3.14765$ $N_5 := 2.09213$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot (A \cdot D - A \cdot C + B \cdot C)}{A \cdot D \cdot E} = 4.889171$$

$$Num := \frac{N_u \cdot (A \cdot D - A \cdot C + B \cdot C)}{\sqrt{\left[N_u \cdot (A \cdot D - A \cdot C + B \cdot C)\right]^2}}$$

$$Den := \frac{A \cdot D \cdot E}{\sqrt{(A \cdot D \cdot E)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2} \cdot (A \cdot D - A \cdot C + B \cdot C)}{A \cdot D \cdot E \cdot \sqrt{N_u{}^2 \cdot (A \cdot D - A \cdot C + B \cdot C)^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 0: $\frac{B \cdot N_u}{\sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 3, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (A + C - A \cdot C)}{A \cdot \sqrt{N_u^2 \cdot (A + C - A \cdot C)^2}}$

0, 2, 3, 0, 0: $\frac{N_u \cdot (B \cdot C - C + 1)}{\sqrt{N_u^2 \cdot (B \cdot C - C + 1)^2}}$

1, 2, 3, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (A - A \cdot C + B \cdot C)}{A \cdot \sqrt{N_u^2 \cdot (A - A \cdot C + B \cdot C)^2}}$

0, 0, 0, 4, 0: $\frac{N_u \cdot \sqrt{D^2}}{\sqrt{D^2 \cdot N_u^2}}$

1, 0, 0, 4, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A \cdot D - A + 1)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A \cdot D - A + 1)^2}}$

0, 2, 0, 4, 0: $\frac{N_u \cdot \sqrt{D^2} \cdot (B + D - 1)}{D \cdot \sqrt{N_u^2 \cdot (B + D - 1)^2}}$

1, 2, 0, 4, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (B - A + A \cdot D)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (B - A + A \cdot D)^2}}$

0, 0, 3, 4, 0: $\frac{N_u \cdot \sqrt{D^2}}{\sqrt{D^2 \cdot N_u^2}}$

1, 0, 3, 4, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (C - A \cdot C + A \cdot D)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (C - A \cdot C + A \cdot D)^2}}$

0, 2, 3, 4, 0: $\frac{N_u \cdot \sqrt{D^2} \cdot (D - C + B \cdot C)}{D \cdot \sqrt{N_u^2 \cdot (D - C + B \cdot C)^2}}$

1, 2, 3, 4, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A \cdot D - A \cdot C + B \cdot C)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A \cdot D - A \cdot C + B \cdot C)^2}}$

0, 0, 0, 0, 5: $\frac{N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u^2}}$

1, 0, 0, 0, 5: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 5: $\frac{B \cdot N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 5: $\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 0, 5: $\frac{N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u^2}}$

1, 0, 3, 0, 5: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A + C - A \cdot C)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A + C - A \cdot C)^2}}$

0, 2, 3, 0, 5: $\frac{N_u \cdot \sqrt{E^2} \cdot (B \cdot C - C + 1)}{E \cdot \sqrt{N_u^2 \cdot (B \cdot C - C + 1)^2}}$

1, 2, 3, 0, 5: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A - A \cdot C + B \cdot C)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A - A \cdot C + B \cdot C)^2}}$

0, 0, 0, 4, 5: $\frac{N_u \cdot \sqrt{D^2 \cdot E^2}}{E \cdot \sqrt{D^2 \cdot N_u^2}}$

1, 0, 0, 4, 5: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2} \cdot (A \cdot D - A + 1)}{A \cdot D \cdot E \cdot \sqrt{N_u^2 \cdot (A \cdot D - A + 1)^2}}$

0, 2, 0, 4, 5: $\frac{N_u \cdot \sqrt{D^2 \cdot E^2} \cdot (B + D - 1)}{D \cdot E \cdot \sqrt{N_u^2 \cdot (B + D - 1)^2}}$

1, 2, 0, 4, 5: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2} \cdot (B - A + A \cdot D)}{A \cdot D \cdot E \cdot \sqrt{N_u^2 \cdot (B - A + A \cdot D)^2}}$

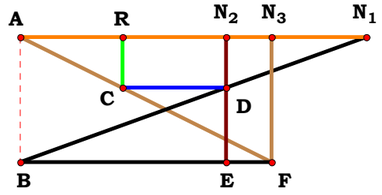
0, 0, 3, 4, 5: $\frac{N_u \cdot \sqrt{D^2 \cdot E^2}}{E \cdot \sqrt{D^2 \cdot N_u^2}}$

1, 0, 3, 4, 5: $\frac{N_u \cdot (C - A \cdot C + A \cdot D) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{N_u^2 \cdot (C - A \cdot C + A \cdot D)^2}}$

0, 2, 3, 4, 5: $\frac{N_u \cdot \sqrt{D^2 \cdot E^2} \cdot (D - C + B \cdot C)}{D \cdot E \cdot \sqrt{N_u^2 \cdot (D - C + B \cdot C)^2}}$

1, 2, 3, 4, 5: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2} \cdot (A \cdot D - A \cdot C + B \cdot C)}{A \cdot D \cdot E \cdot \sqrt{N_u^2 \cdot (A \cdot D - A \cdot C + B \cdot C)^2}}$

1CST4R0



$N_1 = 2.76768$
$N_2 = 1.64646$
$N_3 = 2.01010$
$R = 0.81431$

Unit. $AB := 1$ Given. $N_1 := 2.76768$ $N_2 := 1.64646$ $N_3 := 2.01010$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$\frac{N_u \cdot (B - A)}{B \cdot C} = 0.814315$ $Num := \frac{N_u \cdot (B - A)}{\sqrt{\left[N_u \cdot (B - A)\right]^2}}$ $Den := \frac{B \cdot C}{\sqrt{(B \cdot C)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{N_u \cdot \sqrt{B^2 \cdot C^2} \cdot (B - A)}{B \cdot C \cdot \sqrt{N_u{}^2 \cdot (A - B)^2}} = 0$

For 3 variables there are 8 subsets.

0, 0, 0: 0

1, 0, 0: $-\frac{N_u \cdot (A-1)}{\sqrt{N_u^{\,2} \cdot (A-1)^2}}$

0, 2, 0: $\frac{N_u \cdot (B-1) \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^{\,2} \cdot (B-1)^2}}$

1, 2, 0: $-\frac{N_u \cdot \sqrt{B^2} \cdot (A-B)}{B \cdot \sqrt{N_u^{\,2} \cdot (A-B)^2}}$

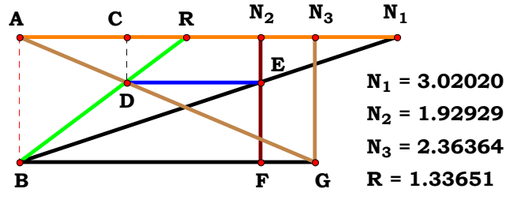
0, 0, 3: 0

1, 0, 3: $-\frac{N_u \cdot (A-1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^{\,2} \cdot (A-1)^2}}$

0, 2, 3: $\frac{N_u \cdot (B-1) \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{N_u^{\,2} \cdot (B-1)^2}}$

1, 2, 3: $\frac{N_u \cdot \sqrt{B^2 \cdot C^2} \cdot (B-A)}{B \cdot C \cdot \sqrt{N_u^{\,2} \cdot (A-B)^2}}$

1CST4R1



Unit. $AB := 1$ **Given.** $N_1 := 3.02020$ $N_2 := 1.92929$ $N_3 := 2.36364$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (B - A)}{A \cdot C} = 1.336512$$

$$Num := \frac{N_u \cdot (B - A)}{\sqrt{\left[N_u \cdot (B - A)\right]^2}}$$

$$Den := \frac{A \cdot C}{\sqrt{(A \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^2 \cdot C^2} \cdot (B - A)}{A \cdot C \cdot \sqrt{{N_u}^2 \cdot (A - B)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: 0

1, 0, 0: $-\frac{N_u \cdot (A-1) \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u{}^2 \cdot (A-1)^2}}$

0, 2, 0: $\frac{N_u \cdot (B-1)}{\sqrt{N_u{}^2 \cdot (B-1)^2}}$

1, 2, 0: $-\frac{N_u \cdot \sqrt{A^2} \cdot (A-B)}{A \cdot \sqrt{N_u{}^2 \cdot (A-B)^2}}$

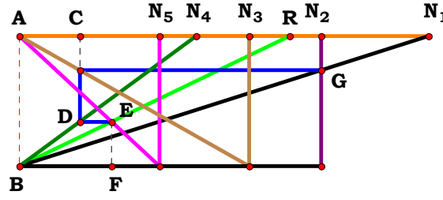
0, 0, 3: 0

1, 0, 3: $-\frac{N_u \cdot (A-1) \cdot \sqrt{A^2 \cdot C^2}}{A \cdot C \cdot \sqrt{N_u{}^2 \cdot (A-1)^2}}$

0, 2, 3: $\frac{N_u \cdot (B-1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u{}^2 \cdot (B-1)^2}}$

1, 2, 3: $\frac{N_u \cdot \sqrt{A^2 \cdot C^2} \cdot (B-A)}{A \cdot C \cdot \sqrt{N_u{}^2 \cdot (A-B)^2}}$

1CST4R2



$N_1 = 3.13560$
$N_2 = 2.31231$
$N_3 = 1.76495$
$N_4 = 1.35578$
$N_5 = 1.07512$
$R = 2.07033$

Unit. $AB := 1$ **Given.** $N_1 := 3.13560$ $N_2 := 2.31231$ $N_3 := 1.76495$ $N_4 := 1.35578$

$N_5 := 1.07512$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot (A \cdot D + B \cdot C - B \cdot D)}{D \cdot E \cdot (B - A)} = 2.070321$$

$$Num := \frac{N_u \cdot (A \cdot D + B \cdot C - B \cdot D)}{\sqrt{\left[N_u \cdot (A \cdot D + B \cdot C - B \cdot D)\right]^2}}$$

$$Den := \frac{D \cdot E \cdot (B - A)}{\sqrt{[D \cdot E \cdot (B - A)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{D^2 \cdot E^2 \cdot (A - B)^2} \cdot (A \cdot D + B \cdot C - B \cdot D)}{D \cdot E \cdot \sqrt{N_u{}^2 \cdot (A \cdot D + B \cdot C - B \cdot D)^2} \cdot (B - A)} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: 0

1, 0, 0, 0, 0: $$-\frac{A \cdot N_u \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{A^2 \cdot N_u{}^2}}$$

0, 2, 0, 0, 0: $$\frac{N_u \cdot \sqrt{(B-1)^2}}{(B-1) \cdot \sqrt{N_u{}^2}}$$

1, 2, 0, 0, 0: $$-\frac{A \cdot N_u \cdot \sqrt{(A-B)^2}}{\sqrt{A^2 \cdot N_u{}^2} \cdot (A-B)}$$

0, 0, 3, 0, 0: 0

1, 0, 3, 0, 0: $$-\frac{N_u \cdot \sqrt{(A-1)^2} \cdot (A+C-1)}{\sqrt{N_u{}^2 \cdot (A+C-1)^2} \cdot (A-1)}$$

0, 2, 3, 0, 0: $$\frac{N_u \cdot \sqrt{(B-1)^2} \cdot (B \cdot C - B + 1)}{(B-1) \cdot \sqrt{N_u{}^2 \cdot (B \cdot C - B + 1)^2}}$$

1, 2, 3, 0, 0: $$-\frac{N_u \cdot \sqrt{(A-B)^2} \cdot (A - B + B \cdot C)}{\sqrt{N_u{}^2 \cdot (A - B + B \cdot C)^2} \cdot (A-B)}$$

0, 0, 0, 4, 0: 0

1, 0, 0, 4, 0: $$-\frac{N_u \cdot \sqrt{D^2 \cdot (A-1)^2} \cdot (A \cdot D - D + 1)}{D \cdot (A-1) \cdot \sqrt{N_u{}^2 \cdot (A \cdot D - D + 1)^2}}$$

0, 2, 0, 4, 0: $$\frac{N_u \cdot \sqrt{D^2 \cdot (B-1)^2} \cdot (B + D - B \cdot D)}{D \cdot \sqrt{N_u{}^2 \cdot (B + D - B \cdot D)^2} \cdot (B-1)}$$

1, 2, 0, 4, 0: $$-\frac{N_u \cdot \sqrt{D^2 \cdot (A-B)^2} \cdot (B + A \cdot D - B \cdot D)}{D \cdot \sqrt{N_u{}^2 \cdot (B + A \cdot D - B \cdot D)^2} \cdot (A-B)}$$

0, 0, 3, 4, 0: 0

1, 0, 3, 4, 0: $$-\frac{N_u \cdot \sqrt{D^2 \cdot (A-1)^2} \cdot (C - D + A \cdot D)}{D \cdot (A-1) \cdot \sqrt{N_u{}^2 \cdot (C - D + A \cdot D)^2}}$$

0, 2, 3, 4, 0: $$\frac{N_u \cdot \sqrt{D^2 \cdot (B-1)^2} \cdot (D + B \cdot C - B \cdot D)}{D \cdot (B-1) \cdot \sqrt{N_u{}^2 \cdot (D + B \cdot C - B \cdot D)^2}}$$

1, 2, 3, 4, 0: $$-\frac{N_u \cdot \sqrt{D^2 \cdot (A-B)^2} \cdot (A \cdot D + B \cdot C - B \cdot D)}{D \cdot \sqrt{N_u{}^2 \cdot (A \cdot D + B \cdot C - B \cdot D)^2} \cdot (A-B)}$$

0, 0, 0, 0, 5: 0

1, 0, 0, 0, 5: $$-\frac{\mathbf{A}\cdot\mathbf{N_u}\cdot\sqrt{\mathbf{E}^2\cdot(\mathbf{A}-1)^2}}{\mathbf{E}\cdot(\mathbf{A}-1)\cdot\sqrt{\mathbf{A}^2\cdot\mathbf{N_u}^2}}$$

0, 2, 0, 0, 5: $$\frac{\mathbf{N_u}\cdot\sqrt{\mathbf{E}^2\cdot(\mathbf{B}-1)^2}}{\mathbf{E}\cdot(\mathbf{B}-1)\cdot\sqrt{\mathbf{N_u}^2}}$$

1, 2, 0, 0, 5: $$-\frac{\mathbf{A}\cdot\mathbf{N_u}\cdot\sqrt{\mathbf{E}^2\cdot(\mathbf{A}-\mathbf{B})^2}}{\mathbf{E}\cdot\sqrt{\mathbf{A}^2\cdot\mathbf{N_u}^2}\cdot(\mathbf{A}-\mathbf{B})}$$

0, 0, 3, 0, 5: 0

1, 0, 3, 0, 5: $$-\frac{\mathbf{N_u}\cdot\sqrt{\mathbf{E}^2\cdot(\mathbf{A}-1)^2}\cdot(\mathbf{A}+\mathbf{C}-1)}{\mathbf{E}\cdot\sqrt{\mathbf{N_u}^2\cdot(\mathbf{A}+\mathbf{C}-1)^2}\cdot(\mathbf{A}-1)}$$

0, 2, 3, 0, 5: $$\frac{\mathbf{N_u}\cdot\sqrt{\mathbf{E}^2\cdot(\mathbf{B}-1)^2}\cdot(\mathbf{B}\cdot\mathbf{C}-\mathbf{B}+1)}{\mathbf{E}\cdot(\mathbf{B}-1)\cdot\sqrt{\mathbf{N_u}^2\cdot(\mathbf{B}\cdot\mathbf{C}-\mathbf{B}+1)^2}}$$

1, 2, 3, 0, 5: $$-\frac{\mathbf{N_u}\cdot\sqrt{\mathbf{E}^2\cdot(\mathbf{A}-\mathbf{B})^2}\cdot(\mathbf{A}-\mathbf{B}+\mathbf{B}\cdot\mathbf{C})}{\mathbf{E}\cdot\sqrt{\mathbf{N_u}^2\cdot(\mathbf{A}-\mathbf{B}+\mathbf{B}\cdot\mathbf{C})^2}\cdot(\mathbf{A}-\mathbf{B})}$$

0, 0, 0, 4, 5: 0

1, 0, 0, 4, 5: $$-\frac{\mathbf{N_u}\cdot\sqrt{\mathbf{D}^2\cdot\mathbf{E}^2\cdot(\mathbf{A}-1)^2}\cdot(\mathbf{A}\cdot\mathbf{D}-\mathbf{D}+1)}{\mathbf{D}\cdot\mathbf{E}\cdot(\mathbf{A}-1)\cdot\sqrt{\mathbf{N_u}^2\cdot(\mathbf{A}\cdot\mathbf{D}-\mathbf{D}+1)^2}}$$

0, 2, 0, 4, 5: $$\frac{\mathbf{N_u}\cdot(\mathbf{B}+\mathbf{D}-\mathbf{B}\cdot\mathbf{D})\cdot\sqrt{\mathbf{D}^2\cdot\mathbf{E}^2\cdot(\mathbf{B}-1)^2}}{\mathbf{D}\cdot\mathbf{E}\cdot\sqrt{\mathbf{N_u}^2\cdot(\mathbf{B}+\mathbf{D}-\mathbf{B}\cdot\mathbf{D})^2}\cdot(\mathbf{B}-1)}$$

1, 2, 0, 4, 5: $$-\frac{\mathbf{N_u}\cdot(\mathbf{B}+\mathbf{A}\cdot\mathbf{D}-\mathbf{B}\cdot\mathbf{D})\cdot\sqrt{\mathbf{D}^2\cdot\mathbf{E}^2\cdot(\mathbf{A}-\mathbf{B})^2}}{\mathbf{D}\cdot\mathbf{E}\cdot\sqrt{\mathbf{N_u}^2\cdot(\mathbf{B}+\mathbf{A}\cdot\mathbf{D}-\mathbf{B}\cdot\mathbf{D})^2}\cdot(\mathbf{A}-\mathbf{B})}$$

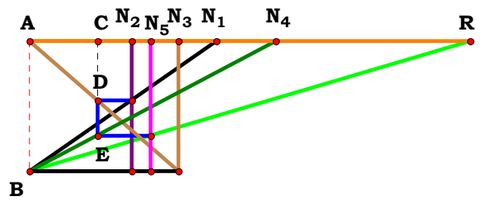
0, 0, 3, 4, 5: 0

1, 0, 3, 4, 5: $$-\frac{\mathbf{N_u}\cdot\sqrt{\mathbf{D}^2\cdot\mathbf{E}^2\cdot(\mathbf{A}-1)^2}\cdot(\mathbf{C}-\mathbf{D}+\mathbf{A}\cdot\mathbf{D})}{\mathbf{D}\cdot\mathbf{E}\cdot(\mathbf{A}-1)\cdot\sqrt{\mathbf{N_u}^2\cdot(\mathbf{C}-\mathbf{D}+\mathbf{A}\cdot\mathbf{D})^2}}$$

0, 2, 3, 4, 5: $$\frac{\mathbf{N_u}\cdot(\mathbf{D}+\mathbf{B}\cdot\mathbf{C}-\mathbf{B}\cdot\mathbf{D})\cdot\sqrt{\mathbf{D}^2\cdot\mathbf{E}^2\cdot(\mathbf{B}-1)^2}}{\mathbf{D}\cdot\mathbf{E}\cdot(\mathbf{B}-1)\cdot\sqrt{\mathbf{N_u}^2\cdot(\mathbf{D}+\mathbf{B}\cdot\mathbf{C}-\mathbf{B}\cdot\mathbf{D})^2}}$$

1, 2, 3, 4, 5: $$\frac{\mathbf{N_u}\cdot\sqrt{\mathbf{D}^2\cdot\mathbf{E}^2\cdot(\mathbf{A}-\mathbf{B})^2}\cdot(\mathbf{A}\cdot\mathbf{D}+\mathbf{B}\cdot\mathbf{C}-\mathbf{B}\cdot\mathbf{D})}{\mathbf{D}\cdot\mathbf{E}\cdot\sqrt{\mathbf{N_u}^2\cdot(\mathbf{A}\cdot\mathbf{D}+\mathbf{B}\cdot\mathbf{C}-\mathbf{B}\cdot\mathbf{D})^2}\cdot(\mathbf{B}-\mathbf{A})}$$

1CST4R3



$N_1 = 1.43090$
$N_2 = 0.78196$
$N_3 = 1.14506$
$N_4 = 1.88850$
$N_5 = 0.92984$
$R = 3.38140$

Unit. $AB := 1$ Given. $N_1 := 1.43090$ $N_2 := .78196$ $N_3 := 1.14506$ $N_4 := 1.88850$

$N_5 := .92984$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot C \cdot N_u}{D \cdot E \cdot (B - A)} = 3.38144$$

$$Num := \frac{B \cdot C \cdot N_u}{\sqrt{(B \cdot C \cdot N_u)^2}}$$

$$Den := \frac{D \cdot E \cdot (B - A)}{\sqrt{[D \cdot E \cdot (B - A)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot C \cdot N_u \cdot \sqrt{D^2 \cdot E^2 \cdot (A - B)^2}}{D \cdot E \cdot (B - A) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: 0

1, 0, 0, 0, 0: $-\frac{N_u \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{(B-1)^2}}{(B-1) \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 0: $-\frac{B \cdot N_u \cdot \sqrt{(A-B)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot (A-B)}$

0, 0, 3, 0, 0: 0

1, 0, 3, 0, 0: $-\frac{C \cdot N_u \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 0, 0: $\frac{B \cdot C \cdot N_u \cdot \sqrt{(B-1)^2}}{(B-1) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 0, 0: $-\frac{B \cdot C \cdot N_u \cdot \sqrt{(A-B)^2}}{(A-B) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

0, 0, 0, 4, 0: 0

1, 0, 0, 4, 0: $-\frac{N_u \cdot \sqrt{D^2 \cdot (A-1)^2}}{D \cdot (A-1) \cdot \sqrt{N_u^2}}$

0, 2, 0, 4, 0: $\frac{B \cdot N_u \cdot \sqrt{D^2 \cdot (B-1)^2}}{D \cdot (B-1) \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 4, 0: $-\frac{B \cdot N_u \cdot \sqrt{D^2 \cdot (A-B)^2}}{D \cdot \sqrt{B^2 \cdot N_u^2} \cdot (A-B)}$

0, 0, 3, 4, 0: 0

1, 0, 3, 4, 0: $-\frac{C \cdot N_u \cdot \sqrt{D^2 \cdot (A-1)^2}}{D \cdot (A-1) \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 4, 0: $\frac{B \cdot C \cdot N_u \cdot \sqrt{D^2 \cdot (B-1)^2}}{D \cdot (B-1) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 4, 0: $-\frac{B \cdot C \cdot N_u \cdot \sqrt{D^2 \cdot (A-B)^2}}{D \cdot (A-B) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

0, 0, 0, 0, 5: 0

1, 0, 0, 0, 5: $-\frac{N_u \cdot \sqrt{E^2 \cdot (A-1)^2}}{E \cdot (A-1) \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 5: $\frac{B \cdot N_u \cdot \sqrt{E^2 \cdot (B-1)^2}}{E \cdot (B-1) \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 5: $-\frac{B \cdot N_u \cdot \sqrt{E^2 \cdot (A-B)^2}}{E \cdot \sqrt{B^2 \cdot N_u^2} \cdot (A-B)}$

0, 0, 3, 0, 5: 0

1, 0, 3, 0, 5: $-\frac{C \cdot N_u \cdot \sqrt{E^2 \cdot (A-1)^2}}{E \cdot (A-1) \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 0, 5: $\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (B-1)^2}}{E \cdot (B-1) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 0, 5: $-\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (A-B)^2}}{E \cdot (A-B) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

0, 0, 0, 4, 5: 0

1, 0, 0, 4, 5: $-\frac{N_u \cdot \sqrt{D^2 \cdot E^2 \cdot (A-1)^2}}{D \cdot E \cdot (A-1) \cdot \sqrt{N_u^2}}$

0, 2, 0, 4, 5: $\frac{B \cdot N_u \cdot \sqrt{D^2 \cdot E^2 \cdot (B-1)^2}}{D \cdot E \cdot (B-1) \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 4, 5: $-\frac{B \cdot N_u \cdot \sqrt{D^2 \cdot E^2 \cdot (A-B)^2}}{D \cdot E \cdot \sqrt{B^2 \cdot N_u^2} \cdot (A-B)}$

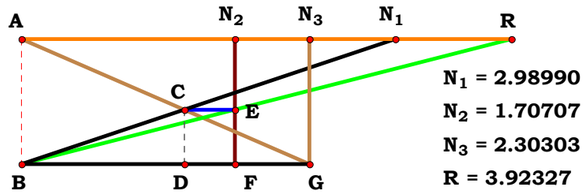
0, 0, 3, 4, 5: 0

1, 0, 3, 4, 5: $-\frac{C \cdot N_u \cdot \sqrt{D^2 \cdot E^2 \cdot (A-1)^2}}{D \cdot E \cdot (A-1) \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 4, 5: $\frac{B \cdot C \cdot N_u \cdot \sqrt{D^2 \cdot E^2 \cdot (B-1)^2}}{D \cdot E \cdot (B-1) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 4, 5: $\frac{B \cdot C \cdot N_u \cdot \sqrt{D^2 \cdot E^2 \cdot (A-B)^2}}{D \cdot E \cdot (B-A) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1CST4R4



Unit. $AB := 1$ **Given.** $N_1 := 2.98990$ $N_2 := 1.70707$ $N_3 := 2.30303$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$\frac{N_u \cdot (A + C)}{A \cdot B} = 3.923267$ $Num := \frac{N_u \cdot (A + C)}{\sqrt{[N_u \cdot (A + C)]^2}}$ $Den := \frac{A \cdot B}{\sqrt{(A \cdot B)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^2 \cdot B^2} \cdot (A + C)}{A \cdot B \cdot \sqrt{{N_u}^2 \cdot (A + C)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u}{\sqrt{N_u^2}}$$

1, 0, 0: $$\frac{N_u \cdot (A+1) \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$$

0, 2, 0: $$\frac{N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2}}$$

1, 2, 0: $$\frac{N_u \cdot (A+1) \cdot \sqrt{A^2 \cdot B^2}}{A \cdot B \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$$

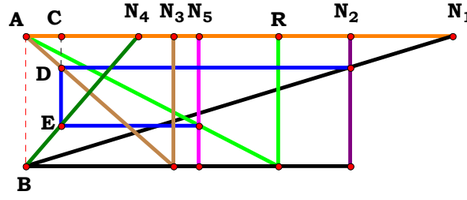
0, 0, 3: $$\frac{N_u \cdot (C+1)}{\sqrt{N_u^2 \cdot (C+1)^2}}$$

1, 0, 3: $$\frac{N_u \cdot \sqrt{A^2} \cdot (A+C)}{A \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$$

0, 2, 3: $$\frac{N_u \cdot (C+1) \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2 \cdot (C+1)^2}}$$

1, 2, 3: $$\frac{N_u \cdot \sqrt{A^2 \cdot B^2} \cdot (A+C)}{A \cdot B \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$$

1CST4R5



$N_1 = 3.27120$
$N_2 = 2.48665$
$N_3 = 1.13537$
$N_4 = 0.86181$
$N_5 = 1.32695$
$R = 1.93989$

Unit. $AB := 1$ Given. $N_1 := 3.27120$ $N_2 := 2.48665$ $N_3 := 1.13537$ $N_4 := .86181$

$N_5 := 1.32695$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot C \cdot N_u}{E \cdot (A \cdot D + B \cdot C - B \cdot D)} = 1.939887$$

$$Num := \frac{B \cdot C \cdot N_u}{\sqrt{(B \cdot C \cdot N_u)^2}}$$

$$Den := \frac{E \cdot (A \cdot D + B \cdot C - B \cdot D)}{\sqrt{[E \cdot (A \cdot D + B \cdot C - B \cdot D)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (A \cdot D + B \cdot C - B \cdot D)^2}}{E \cdot \sqrt{B^2 \cdot C^2 \cdot N_u{}^2} \cdot (A \cdot D + B \cdot C - B \cdot D)} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 0: $\frac{B \cdot N_u}{\sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 0, 0: $\frac{N_u \cdot \sqrt{C^2}}{\sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 0: $\frac{C \cdot N_u \cdot \sqrt{(A + C - 1)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (A + C - 1)}$

0, 2, 3, 0, 0: $\frac{B \cdot C \cdot N_u \cdot \sqrt{(B \cdot C - B + 1)^2}}{\sqrt{B^2 \cdot C^2 \cdot N_u^2} \cdot (B \cdot C - B + 1)}$

1, 2, 3, 0, 0: $\frac{B \cdot C \cdot N_u \cdot \sqrt{(A - B + B \cdot C)^2}}{\sqrt{B^2 \cdot C^2 \cdot N_u^2} \cdot (A - B + B \cdot C)}$

0, 0, 0, 4, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 4, 0: $\frac{N_u \cdot \sqrt{(A \cdot D - D + 1)^2}}{\sqrt{N_u^2} \cdot (A \cdot D - D + 1)}$

0, 2, 0, 4, 0: $\frac{B \cdot N_u \cdot \sqrt{(B + D - B \cdot D)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot (B + D - B \cdot D)}$

1, 2, 0, 4, 0: $\frac{B \cdot N_u \cdot \sqrt{(B + A \cdot D - B \cdot D)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot (B + A \cdot D - B \cdot D)}$

0, 0, 3, 4, 0: $\frac{N_u \cdot \sqrt{C^2}}{\sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 4, 0: $\frac{C \cdot N_u \cdot \sqrt{(C - D + A \cdot D)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (C - D + A \cdot D)}$

0, 2, 3, 4, 0: $\frac{B \cdot C \cdot N_u \cdot \sqrt{(D + B \cdot C - B \cdot D)^2}}{(D + B \cdot C - B \cdot D) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 4, 0: $\frac{B \cdot C \cdot N_u \cdot \sqrt{(A \cdot D + B \cdot C - B \cdot D)^2}}{\sqrt{B^2 \cdot C^2 \cdot N_u^2} \cdot (A \cdot D + B \cdot C - B \cdot D)}$

0, 0, 0, 0, 5:

$$\frac{B \cdot N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{B^2 \cdot N_u^2}}$$

1, 0, 0, 0, 5:

$$\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{B^2 \cdot N_u^2}}$$

0, 2, 0, 0, 5:

$$\frac{B \cdot N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{B^2 \cdot N_u^2}}$$

1, 2, 0, 0, 5:

$$\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{B^2 \cdot N_u^2}}$$

0, 0, 3, 0, 5:

$$\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (B \cdot C - B + 1)^2}}{E \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2} \cdot (B \cdot C - B + 1)}$$

1, 0, 3, 0, 5:

$$\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (A - B + B \cdot C)^2}}{E \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2} \cdot (A - B + B \cdot C)}$$

0, 2, 3, 0, 5:

$$\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (B \cdot C - B + 1)^2}}{E \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2} \cdot (B \cdot C - B + 1)}$$

1, 2, 3, 0, 5:

$$\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (A - B + B \cdot C)^2}}{E \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2} \cdot (A - B + B \cdot C)}$$

0, 0, 0, 4, 5:

$$\frac{B \cdot N_u \cdot \sqrt{E^2 \cdot (B + D - B \cdot D)^2}}{E \cdot \sqrt{B^2 \cdot N_u^2} \cdot (B + D - B \cdot D)}$$

1, 0, 0, 4, 5:

$$\frac{B \cdot N_u \cdot \sqrt{E^2 \cdot (B + A \cdot D - B \cdot D)^2}}{E \cdot \sqrt{B^2 \cdot N_u^2} \cdot (B + A \cdot D - B \cdot D)}$$

0, 2, 0, 4, 5:

$$\frac{B \cdot N_u \cdot \sqrt{E^2 \cdot (B + D - B \cdot D)^2}}{E \cdot \sqrt{B^2 \cdot N_u^2} \cdot (B + D - B \cdot D)}$$

1, 2, 0, 4, 5:

$$\frac{B \cdot N_u \cdot \sqrt{E^2 \cdot (B + A \cdot D - B \cdot D)^2}}{E \cdot \sqrt{B^2 \cdot N_u^2} \cdot (B + A \cdot D - B \cdot D)}$$

0, 0, 3, 4, 5:

$$\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (D + B \cdot C - B \cdot D)^2}}{E \cdot (D + B \cdot C - B \cdot D) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$$

1, 0, 3, 4, 5:

$$\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (A \cdot D + B \cdot C - B \cdot D)^2}}{E \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2} \cdot (A \cdot D + B \cdot C - B \cdot D)}$$

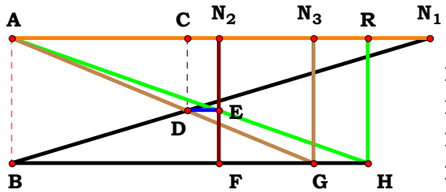
0, 2, 3, 4, 5:

$$\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (D + B \cdot C - B \cdot D)^2}}{E \cdot (D + B \cdot C - B \cdot D) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$$

1, 2, 3, 4, 5:

$$\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (A \cdot D + B \cdot C - B \cdot D)^2}}{E \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2} \cdot (A \cdot D + B \cdot C - B \cdot D)}$$

1CST4R6



$N_1 = 3.34343$
$N_2 = 1.65657$
$N_3 = 2.41414$
$R = 2.85270$

Unit. $AB := 1$ **Given.** $N_1 := 3.34343$ $N_2 := 1.65657$ $N_3 := 2.41414$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (A + C)}{B \cdot C} = 2.852704$$

$$Num := \frac{N_u \cdot (A + C)}{\sqrt{\left[N_u \cdot (A + C)\right]^2}}$$

$$Den := \frac{B \cdot C}{\sqrt{(B \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot C^2} \cdot (A + C)}{B \cdot C \cdot \sqrt{{N_u}^2 \cdot (A + C)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u}{\sqrt{N_u^2}}$$

1, 0, 0: $$\frac{N_u \cdot (A+1)}{\sqrt{N_u^2 \cdot (A+1)^2}}$$

0, 2, 0: $$\frac{N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2}}$$

1, 2, 0: $$\frac{N_u \cdot (A+1) \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$$

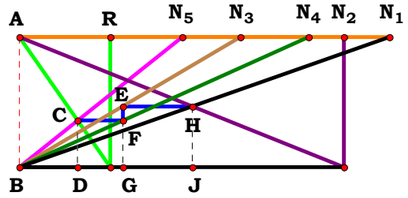
0, 0, 3: $$\frac{N_u \cdot (C+1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (C+1)^2}}$$

1, 0, 3: $$\frac{N_u \cdot \sqrt{C^2} \cdot (A+C)}{C \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$$

0, 2, 3: $$\frac{N_u \cdot (C+1) \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{N_u^2 \cdot (C+1)^2}}$$

1, 2, 3: $$\frac{N_u \cdot \sqrt{B^2 \cdot C^2} \cdot (A+C)}{B \cdot C \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$$

1CST5R0



$N_1 = 2.83534$
$N_2 = 2.48665$
$N_3 = 1.69715$
$N_4 = 2.21782$
$N_5 = 1.24947$
$R = 0.69538$

Unit. $AB := 1$ Given. $N_1 := 2.83534$ $N_2 := 2.48665$ $N_3 := 1.69715$ $N_4 := 2.21782$

$N_5 := 1.24947$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot D \cdot N_u}{E \cdot (A \cdot C - A \cdot D + B \cdot C)} = 0.695376$$

$$Num := \frac{A \cdot D \cdot N_u}{\sqrt{(A \cdot D \cdot N_u)^2}}$$

$$Den := \frac{E \cdot (A \cdot C - A \cdot D + B \cdot C)}{\sqrt{[E \cdot (A \cdot C - A \cdot D + B \cdot C)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot D \cdot N_u \cdot \sqrt{E^2 \cdot (A \cdot C - A \cdot D + B \cdot C)^2}}{E \cdot \sqrt{A^2 \cdot D^2 \cdot N_u^{\,2}} \cdot (A \cdot C - A \cdot D + B \cdot C)} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0: $\frac{A \cdot N_u}{\sqrt{A^2 \cdot N_u^2}}$

0, 2, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2}}$

1, 2, 0, 0, 0: $\frac{A \cdot N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{A^2 \cdot N_u^2}}$

0, 0, 3, 0, 0: $\frac{N_u \cdot \sqrt{(2 \cdot C - 1)^2}}{\sqrt{N_u^2} \cdot (2 \cdot C - 1)}$

1, 0, 3, 0, 0: $\frac{A \cdot N_u \cdot \sqrt{(C - A + A \cdot C)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (C - A + A \cdot C)}$

0, 2, 3, 0, 0: $\frac{N_u \cdot \sqrt{(C + B \cdot C - 1)^2}}{\sqrt{N_u^2} \cdot (C + B \cdot C - 1)}$

1, 2, 3, 0, 0: $\frac{A \cdot N_u \cdot \sqrt{(A \cdot C - A + B \cdot C)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (A \cdot C - A + B \cdot C)}$

0, 0, 0, 4, 0: $-\frac{D \cdot N_u \cdot \sqrt{(D - 2)^2}}{(D - 2) \cdot \sqrt{D^2 \cdot N_u^2}}$

1, 0, 0, 4, 0: $\frac{A \cdot D \cdot N_u \cdot \sqrt{(A - A \cdot D + 1)^2}}{\sqrt{A^2 \cdot D^2 \cdot N_u^2} \cdot (A - A \cdot D + 1)}$

0, 2, 0, 4, 0: $\frac{D \cdot N_u \cdot \sqrt{(B - D + 1)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot (B - D + 1)}$

1, 2, 0, 4, 0: $\frac{A \cdot D \cdot N_u \cdot \sqrt{(A + B - A \cdot D)^2}}{\sqrt{A^2 \cdot D^2 \cdot N_u^2} \cdot (A + B - A \cdot D)}$

0, 0, 3, 4, 0: $-\frac{D \cdot N_u \cdot \sqrt{(D - 2 \cdot C)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot (D - 2 \cdot C)}$

1, 0, 3, 4, 0: $\frac{A \cdot D \cdot N_u \cdot \sqrt{(C + A \cdot C - A \cdot D)^2}}{(C + A \cdot C - A \cdot D) \cdot \sqrt{A^2 \cdot D^2 \cdot N_u^2}}$

0, 2, 3, 4, 0: $\frac{D \cdot N_u \cdot \sqrt{(C - D + B \cdot C)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot (C - D + B \cdot C)}$

1, 2, 3, 4, 0: $\frac{A \cdot D \cdot N_u \cdot \sqrt{(A \cdot C - A \cdot D + B \cdot C)^2}}{\sqrt{A^2 \cdot D^2 \cdot N_u^2} \cdot (A \cdot C - A \cdot D + B \cdot C)}$

0, 0, 0, 0, 5: $\frac{N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u{}^2}}$

1, 0, 0, 0, 5: $\frac{A \cdot N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{A^2 \cdot N_u{}^2}}$

0, 2, 0, 0, 5: $\frac{N_u \cdot \sqrt{B^2 \cdot E^2}}{B \cdot E \cdot \sqrt{N_u{}^2}}$

1, 2, 0, 0, 5: $\frac{A \cdot N_u \cdot \sqrt{B^2 \cdot E^2}}{B \cdot E \cdot \sqrt{A^2 \cdot N_u{}^2}}$

0, 0, 3, 0, 5: $\frac{N_u \cdot \sqrt{E^2 \cdot (2 \cdot C - 1)^2}}{E \cdot \sqrt{N_u{}^2} \cdot (2 \cdot C - 1)}$

1, 0, 3, 0, 5: $\frac{A \cdot N_u \cdot \sqrt{E^2 \cdot (C - A + A \cdot C)^2}}{E \cdot \sqrt{A^2 \cdot N_u{}^2} \cdot (C - A + A \cdot C)}$

0, 2, 3, 0, 5: $\frac{N_u \cdot \sqrt{E^2 \cdot (C + B \cdot C - 1)^2}}{E \cdot \sqrt{N_u{}^2} \cdot (C + B \cdot C - 1)}$

1, 2, 3, 0, 5: $\frac{A \cdot N_u \cdot \sqrt{E^2 \cdot (A \cdot C - A + B \cdot C)^2}}{E \cdot \sqrt{A^2 \cdot N_u{}^2} \cdot (A \cdot C - A + B \cdot C)}$

0, 0, 0, 4, 5: $-\frac{D \cdot N_u \cdot \sqrt{E^2 \cdot (D - 2)^2}}{E \cdot (D - 2) \cdot \sqrt{D^2 \cdot N_u{}^2}}$

1, 0, 0, 4, 5: $\frac{A \cdot D \cdot N_u \cdot \sqrt{E^2 \cdot (A - A \cdot D + 1)^2}}{E \cdot \sqrt{A^2 \cdot D^2 \cdot N_u{}^2} \cdot (A - A \cdot D + 1)}$

0, 2, 0, 4, 5: $\frac{D \cdot N_u \cdot \sqrt{E^2 \cdot (B - D + 1)^2}}{E \cdot \sqrt{D^2 \cdot N_u{}^2} \cdot (B - D + 1)}$

1, 2, 0, 4, 5: $\frac{A \cdot D \cdot N_u \cdot \sqrt{E^2 \cdot (A + B - A \cdot D)^2}}{E \cdot \sqrt{A^2 \cdot D^2 \cdot N_u{}^2} \cdot (A + B - A \cdot D)}$

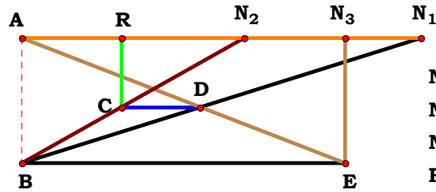
0, 0, 3, 4, 5: $\frac{D \cdot N_u \cdot \sqrt{E^2 \cdot (D - 2 \cdot C)^2}}{E \cdot \sqrt{D^2 \cdot N_u{}^2} \cdot (2 \cdot C - D)}$

1, 0, 3, 4, 5: $\frac{A \cdot D \cdot N_u \cdot \sqrt{E^2 \cdot (C + A \cdot C - A \cdot D)^2}}{E \cdot (C + A \cdot C - A \cdot D) \cdot \sqrt{A^2 \cdot D^2 \cdot N_u{}^2}}$

0, 2, 3, 4, 5: $\frac{D \cdot N_u \cdot \sqrt{E^2 \cdot (C - D + B \cdot C)^2}}{E \cdot \sqrt{D^2 \cdot N_u{}^2} \cdot (C - D + B \cdot C)}$

1, 2, 3, 4, 5: $\frac{A \cdot D \cdot N_u \cdot \sqrt{E^2 \cdot (A \cdot C - A \cdot D + B \cdot C)^2}}{E \cdot \sqrt{A^2 \cdot D^2 \cdot N_u{}^2} \cdot (A \cdot C - A \cdot D + B \cdot C)}$

1CST5R1



$N_1 = 3.19192$
$N_2 = 1.77778$
$N_3 = 2.58586$
$R = 0.79565$

Unit. $AB := 1$ **Given.** $N_1 := 3.19192$ $N_2 := 1.77778$ $N_3 := 2.58586$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$\frac{A \cdot N_u}{B \cdot (A + C)} = 0.79565$ $Num := \frac{A \cdot N_u}{\sqrt{(A \cdot N_u)^2}}$ $Den := \frac{B \cdot (A + C)}{\sqrt{[B \cdot (A + C)]^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{A \cdot N_u \cdot \sqrt{B^2 \cdot (A + C)^2}}{B \cdot \sqrt{A^2 \cdot N_u{}^2} \cdot (A + C)} = 0$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u}{\sqrt{N_u^2}}$$

1, 0, 0: $$\frac{A \cdot N_u \cdot \sqrt{(A+1)^2}}{(A+1) \cdot \sqrt{A^2 \cdot N_u^2}}$$

0, 2, 0: $$\frac{N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2}}$$

1, 2, 0: $$\frac{A \cdot N_u \cdot \sqrt{B^2 \cdot (A+1)^2}}{B \cdot (A+1) \cdot \sqrt{A^2 \cdot N_u^2}}$$

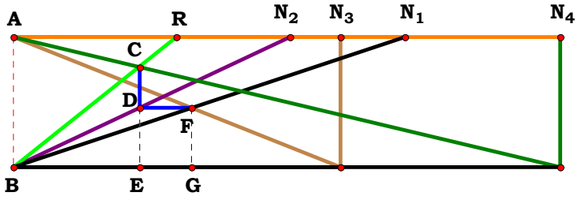
0, 0, 3: $$\frac{N_u \cdot \sqrt{(C+1)^2}}{(C+1) \cdot \sqrt{N_u^2}}$$

1, 0, 3: $$\frac{A \cdot N_u \cdot \sqrt{(A+C)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (A+C)}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{B^2 \cdot (C+1)^2}}{B \cdot (C+1) \cdot \sqrt{N_u^2}}$$

1, 2, 3: $$\frac{A \cdot N_u \cdot \sqrt{B^2 \cdot (A+C)^2}}{B \cdot \sqrt{A^2 \cdot N_u^2} \cdot (A+C)}$$

1CST5R2



$N_1 = 3.00000$
$N_2 = 2.11859$
$N_3 = 2.51075$
$N_4 = 4.19372$
$R = 1.25385$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 2.11859$ $N_3 := 2.51075$ $N_4 := 4.19372$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot N_u}{A \cdot B - A \cdot D + B \cdot C} = 1.253841$$

$$Num := \frac{A \cdot N_u}{\sqrt{(A \cdot N_u)^2}}$$

$$Den := \frac{A \cdot B - A \cdot D + B \cdot C}{\sqrt{(A \cdot B - A \cdot D + B \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{(A \cdot B - A \cdot D + B \cdot C)^2}}{\sqrt{A^2 \cdot N_u{}^2} \cdot (A \cdot B - A \cdot D + B \cdot C)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0: $\frac{A \cdot N_u}{\sqrt{A^2 \cdot N_u^2}}$

0, 2, 0, 0: $\frac{N_u \cdot \sqrt{(2 \cdot B - 1)^2}}{\sqrt{N_u^2} \cdot (2 \cdot B - 1)}$

1, 2, 0, 0: $\frac{A \cdot N_u \cdot \sqrt{(B - A + A \cdot B)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (B - A + A \cdot B)}$

0, 0, 3, 0: $\frac{N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2}}$

1, 0, 3, 0: $\frac{A \cdot N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{A^2 \cdot N_u^2}}$

0, 2, 3, 0: $\frac{N_u \cdot \sqrt{(B + B \cdot C - 1)^2}}{\sqrt{N_u^2} \cdot (B + B \cdot C - 1)}$

1, 2, 3, 0: $\frac{A \cdot N_u \cdot \sqrt{(A \cdot B - A + B \cdot C)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (A \cdot B - A + B \cdot C)}$

0, 0, 0, 4: $-\frac{N_u \cdot \sqrt{(D - 2)^2}}{(D - 2) \cdot \sqrt{N_u^2}}$

1, 0, 0, 4: $\frac{A \cdot N_u \cdot \sqrt{(A - A \cdot D + 1)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (A - A \cdot D + 1)}$

0, 2, 0, 4: $-\frac{N_u \cdot \sqrt{(D - 2 \cdot B)^2}}{\sqrt{N_u^2} \cdot (D - 2 \cdot B)}$

1, 2, 0, 4: $\frac{A \cdot N_u \cdot \sqrt{(B + A \cdot B - A \cdot D)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (B + A \cdot B - A \cdot D)}$

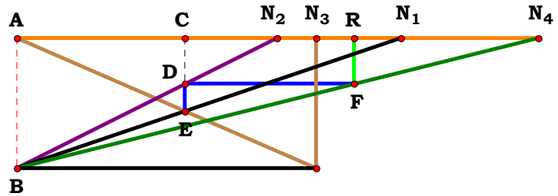
0, 0, 3, 4: $\frac{N_u \cdot \sqrt{(C - D + 1)^2}}{\sqrt{N_u^2} \cdot (C - D + 1)}$

1, 0, 3, 4: $\frac{A \cdot N_u \cdot \sqrt{(A + C - A \cdot D)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (A + C - A \cdot D)}$

0, 2, 3, 4: $\frac{N_u \cdot \sqrt{(B - D + B \cdot C)^2}}{\sqrt{N_u^2} \cdot (B - D + B \cdot C)}$

1, 2, 3, 4: $\frac{A \cdot N_u \cdot \sqrt{(A \cdot B - A \cdot D + B \cdot C)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (A \cdot B - A \cdot D + B \cdot C)}$

1CST5R3



$N_1 = 2.94189$
$N_2 = 1.99268$
$N_3 = 2.29767$
$N_4 = 4.00000$
$R = 2.58965$

Unit. $AB := 1$ Given. $N_1 := 2.94189$ $N_2 := 1.99268$ $N_3 := 2.29767$ $N_4 := 4$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B \cdot N_u}{D \cdot (A + C)} = 2.589654$$

$$Num := \frac{B \cdot N_u}{\sqrt{(B \cdot N_u)^2}}$$

$$Den := \frac{D \cdot (A + C)}{\sqrt{[D \cdot (A + C)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \sqrt{D^2 \cdot (A + C)^2}}{D \cdot \sqrt{B^2 \cdot N_u{}^2} \cdot (A + C)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0: $\frac{N_u \cdot \sqrt{(A+1)^2}}{(A+1) \cdot \sqrt{N_u^2}}$

0, 2, 0, 0: $\frac{B \cdot N_u}{\sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{(A+1)^2}}{(A+1) \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 0: $\frac{N_u \cdot \sqrt{(C+1)^2}}{(C+1) \cdot \sqrt{N_u^2}}$

1, 0, 3, 0: $\frac{N_u \cdot \sqrt{(A+C)^2}}{\sqrt{N_u^2} \cdot (A+C)}$

0, 2, 3, 0: $\frac{B \cdot N_u \cdot \sqrt{(C+1)^2}}{(C+1) \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 3, 0: $\frac{B \cdot N_u \cdot \sqrt{(A+C)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot (A+C)}$

0, 0, 0, 4: $\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2}}$

1, 0, 0, 4: $\frac{N_u \cdot \sqrt{D^2 \cdot (A+1)^2}}{D \cdot (A+1) \cdot \sqrt{N_u^2}}$

0, 2, 0, 4: $\frac{B \cdot N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 4: $\frac{B \cdot N_u \cdot \sqrt{D^2 \cdot (A+1)^2}}{D \cdot (A+1) \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 4: $\frac{N_u \cdot \sqrt{D^2 \cdot (C+1)^2}}{D \cdot (C+1) \cdot \sqrt{N_u^2}}$

1, 0, 3, 4: $\frac{N_u \cdot \sqrt{D^2 \cdot (A+C)^2}}{D \cdot \sqrt{N_u^2} \cdot (A+C)}$

0, 2, 3, 4: $\frac{B \cdot N_u \cdot \sqrt{D^2 \cdot (C+1)^2}}{D \cdot (C+1) \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 3, 4: $\frac{B \cdot N_u \cdot \sqrt{D^2 \cdot (A+C)^2}}{D \cdot \sqrt{B^2 \cdot N_u^2} \cdot (A+C)}$

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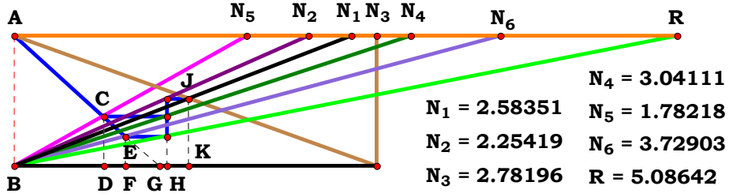

$N_4 = 3.04111$
$N_1 = 2.58351$ $N_5 = 1.78218$
$N_2 = 2.25419$ $N_6 = 3.72903$
$N_3 = 2.78196$ $R = 5.08642$

Unit. $AB := 1$ Given. $N_1 := 2.58351$ $N_2 := 2.25419$ $N_3 := 2.78196$ $N_4 := 3.04111$

$N_5 := 1.78218$ $N_6 := 3.72903$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u \cdot [B \cdot E \cdot (A + C) - A \cdot D \cdot (E - F)]}{B \cdot D \cdot F \cdot (A + C)} = 5.086437$$

$$Num := \frac{N_u \cdot [B \cdot E \cdot (A + C) - A \cdot D \cdot (E - F)]}{\sqrt{[N_u \cdot [B \cdot E \cdot (A + C) - A \cdot D \cdot (E - F)]]^2}}$$

$$Den := \frac{B \cdot D \cdot F \cdot (A + C)}{\sqrt{[B \cdot D \cdot F \cdot (A + C)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot F^2 \cdot (A + C)^2} \cdot (A \cdot B \cdot E - A \cdot D \cdot E + B \cdot C \cdot E + A \cdot D \cdot F)}{B \cdot D \cdot F \cdot (A + C) \cdot \sqrt{N_u^2 \cdot [B \cdot E \cdot (A + C) - A \cdot D \cdot (E - F)]^2}} = 0$$

For 6 variables there are 64 subsets.

0, 0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{(A+1)^2}}{\sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2}}{\sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 0, 0: $\frac{N_u \cdot (B + A \cdot B) \cdot \sqrt{B^2 \cdot (A+1)^2}}{B \cdot (A+1) \cdot \sqrt{B^2 \cdot N_u^2 \cdot (A+1)^2}}$

0, 0, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{(C+1)^2}}{\sqrt{N_u^2 \cdot (C+1)^2}}$

1, 0, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{(A+C)^2}}{\sqrt{N_u^2 \cdot (A+C)^2}}$

0, 2, 3, 0, 0, 0: $\frac{N_u \cdot (B + B \cdot C) \cdot \sqrt{B^2 \cdot (C+1)^2}}{B \cdot (C+1) \cdot \sqrt{B^2 \cdot N_u^2 \cdot (C+1)^2}}$

1, 2, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2 \cdot (A+C)^2} \cdot (A \cdot B + B \cdot C)}{B \cdot (A+C) \cdot \sqrt{B^2 \cdot N_u^2 \cdot (A+C)^2}}$

0, 0, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2}}$

1, 0, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{D^2 \cdot (A+1)^2}}{D \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2}}{D \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 4, 0, 0: $\frac{N_u \cdot (B + A \cdot B) \cdot \sqrt{B^2 \cdot D^2 \cdot (A+1)^2}}{B \cdot D \cdot (A+1) \cdot \sqrt{B^2 \cdot N_u^2 \cdot (A+1)^2}}$

0, 0, 3, 4, 0, 0: $\frac{N_u \cdot \sqrt{D^2 \cdot (C+1)^2}}{D \cdot \sqrt{N_u^2 \cdot (C+1)^2}}$

1, 0, 3, 4, 0, 0: $\frac{N_u \cdot \sqrt{D^2 \cdot (A+C)^2}}{D \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$

0, 2, 3, 4, 0, 0: $\frac{N_u \cdot (B + B \cdot C) \cdot \sqrt{B^2 \cdot D^2 \cdot (C+1)^2}}{B \cdot D \cdot (C+1) \cdot \sqrt{B^2 \cdot N_u^2 \cdot (C+1)^2}}$

1, 2, 3, 4, 0, 0: $\frac{N_u \cdot (A \cdot B + B \cdot C) \cdot \sqrt{B^2 \cdot D^2 \cdot (A+C)^2}}{B \cdot D \cdot (A+C) \cdot \sqrt{B^2 \cdot N_u^2 \cdot (A+C)^2}}$

0, 0, 0, 0, 5, 0:

$$\frac{N_u \cdot (E+1)}{\sqrt{N_u^{\,2} \cdot (E+1)^2}}$$

1, 0, 0, 0, 5, 0:

$$\frac{N_u \cdot (A+E) \cdot \sqrt{(A+1)^2}}{(A+1) \cdot \sqrt{N_u^{\,2} \cdot [A \cdot (E-1) - E \cdot (A+1)]^2}}$$

0, 2, 0, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{B^2} \cdot (2 \cdot B \cdot E - E + 1)}{B \cdot \sqrt{N_u^{\,2} \cdot (2 \cdot B \cdot E - E + 1)^2}}$$

1, 2, 0, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot (A+1)^2} \cdot (A - A \cdot E + B \cdot E + A \cdot B \cdot E)}{B \cdot (A+1) \cdot \sqrt{N_u^{\,2} \cdot [A \cdot (E-1) - B \cdot E \cdot (A+1)]^2}}$$

0, 0, 3, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{(C+1)^2} \cdot (C \cdot E + 1)}{(C+1) \cdot \sqrt{N_u^{\,2} \cdot [E \cdot (C+1) - E + 1]^2}}$$

1, 0, 3, 0, 5, 0:

$$\frac{N_u \cdot (A + C \cdot E) \cdot \sqrt{(A+C)^2}}{(A+C) \cdot \sqrt{N_u^{\,2} \cdot [E \cdot (A+C) - A \cdot (E-1)]^2}}$$

0, 2, 3, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot (C+1)^2} \cdot (B \cdot E - E + B \cdot C \cdot E + 1)}{B \cdot (C+1) \cdot \sqrt{N_u^{\,2} \cdot [B \cdot E \cdot (C+1) - E + 1]^2}}$$

1, 2, 3, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot (A+C)^2} \cdot (A - A \cdot E + A \cdot B \cdot E + B \cdot C \cdot E)}{B \cdot (A+C) \cdot \sqrt{N_u^{\,2} \cdot [A \cdot (E-1) - B \cdot E \cdot (A+C)]^2}}$$

0, 0, 0, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{D^2} \cdot (D + 2 \cdot E - D \cdot E)}{D \cdot \sqrt{N_u^{\,2} \cdot [2 \cdot E - D \cdot (E-1)]^2}}$$

1, 0, 0, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{D^2 \cdot (A+1)^2} \cdot (E + A \cdot D + A \cdot E - A \cdot D \cdot E)}{D \cdot (A+1) \cdot \sqrt{N_u^{\,2} \cdot [E \cdot (A+1) - A \cdot D \cdot (E-1)]^2}}$$

0, 2, 0, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot (D + 2 \cdot B \cdot E - D \cdot E)}{B \cdot D \cdot \sqrt{N_u^{\,2} \cdot [D \cdot (E-1) - 2 \cdot B \cdot E]^2}}$$

1, 2, 0, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot (A+1)^2} \cdot (A \cdot D + B \cdot E + A \cdot B \cdot E - A \cdot D \cdot E)}{B \cdot D \cdot (A+1) \cdot \sqrt{N_u^{\,2} \cdot [B \cdot E \cdot (A+1) - A \cdot D \cdot (E-1)]^2}}$$

0, 0, 3, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{D^2 \cdot (C+1)^2} \cdot (D + E + C \cdot E - D \cdot E)}{D \cdot (C+1) \cdot \sqrt{N_u^{\,2} \cdot [E \cdot (C+1) - D \cdot (E-1)]^2}}$$

1, 0, 3, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{D^2 \cdot (A+C)^2} \cdot (A \cdot D + A \cdot E + C \cdot E - A \cdot D \cdot E)}{D \cdot (A+C) \cdot \sqrt{N_u^{\,2} \cdot [E \cdot (A+C) - A \cdot D \cdot (E-1)]^2}}$$

0, 2, 3, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot (C+1)^2} \cdot (D + B \cdot E - D \cdot E + B \cdot C \cdot E)}{B \cdot D \cdot (C+1) \cdot \sqrt{N_u^{\,2} \cdot [D \cdot (E-1) - B \cdot E \cdot (C+1)]^2}}$$

1, 2, 3, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot (A+C)^2} \cdot (A \cdot D + A \cdot B \cdot E - A \cdot D \cdot E + B \cdot C \cdot E)}{B \cdot D \cdot \sqrt{N_u^{\,2} \cdot [A \cdot D \cdot (E-1) - B \cdot E \cdot (A+C)]^2} \cdot (A+C)}$$

0, 0, 0, 0, 0, 6: $$\frac{N_u \cdot (F+1) \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u{}^2 \cdot (F+1)^2}}$$

1, 0, 0, 0, 0, 6: $$\frac{N_u \cdot \sqrt{F^2 \cdot (A+1)^2} \cdot (A \cdot F + 1)}{F \cdot (A+1) \cdot \sqrt{N_u{}^2 \cdot [A + A \cdot (F-1) + 1]^2}}$$

0, 2, 0, 0, 0, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (2 \cdot B + F - 1)}{B \cdot F \cdot \sqrt{N_u{}^2 \cdot (2 \cdot B + F - 1)^2}}$$

1, 2, 0, 0, 0, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot F^2 \cdot (A+1)^2} \cdot (B - A + A \cdot B + A \cdot F)}{B \cdot F \cdot (A+1) \cdot \sqrt{N_u{}^2 \cdot [B \cdot (A+1) + A \cdot (F-1)]^2}}$$

0, 0, 3, 0, 0, 6: $$\frac{N_u \cdot (C+F) \cdot \sqrt{F^2 \cdot (C+1)^2}}{F \cdot \sqrt{N_u{}^2 \cdot (C+F)^2} \cdot (C+1)}$$

1, 0, 3, 0, 0, 6: $$\frac{N_u \cdot \sqrt{F^2 \cdot (A+C)^2} \cdot (C + A \cdot F)}{F \cdot (A+C) \cdot \sqrt{N_u{}^2 \cdot [A + C + A \cdot (F-1)]^2}}$$

0, 2, 3, 0, 0, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot F^2 \cdot (C+1)^2} \cdot (B + F + B \cdot C - 1)}{B \cdot F \cdot (C+1) \cdot \sqrt{N_u{}^2 \cdot [F + B \cdot (C+1) - 1]^2}}$$

1, 2, 3, 0, 0, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot F^2 \cdot (A+C)^2} \cdot (A \cdot B - A + B \cdot C + A \cdot F)}{B \cdot F \cdot (A+C) \cdot \sqrt{N_u{}^2 \cdot [B \cdot (A+C) + A \cdot (F-1)]^2}}$$

0, 0, 0, 4, 0, 6: $$\frac{N_u \cdot \sqrt{D^2 \cdot F^2} \cdot (D \cdot F - D + 2)}{D \cdot F \cdot \sqrt{N_u{}^2 \cdot [D \cdot (F-1) + 2]^2}}$$

1, 0, 0, 4, 0, 6: $$\frac{N_u \cdot \sqrt{D^2 \cdot F^2 \cdot (A+1)^2} \cdot (A - A \cdot D + A \cdot D \cdot F + 1)}{D \cdot F \cdot (A+1) \cdot \sqrt{N_u{}^2 \cdot [A + A \cdot D \cdot (F-1) + 1]^2}}$$

0, 2, 0, 4, 0, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot F^2} \cdot (2 \cdot B - D + D \cdot F)}{B \cdot D \cdot F \cdot \sqrt{N_u{}^2 \cdot [2 \cdot B + D \cdot (F-1)]^2}}$$

1, 2, 0, 4, 0, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot F^2 \cdot (A+1)^2} \cdot (B + A \cdot B - A \cdot D + A \cdot D \cdot F)}{B \cdot D \cdot F \cdot (A+1) \cdot \sqrt{N_u{}^2 \cdot [B \cdot (A+1) + A \cdot D \cdot (F-1)]^2}}$$

0, 0, 3, 4, 0, 6: $$\frac{N_u \cdot \sqrt{D^2 \cdot F^2 \cdot (C+1)^2} \cdot (C - D + D \cdot F + 1)}{D \cdot F \cdot (C+1) \cdot \sqrt{N_u{}^2 \cdot [C + D \cdot (F-1) + 1]^2}}$$

1, 0, 3, 4, 0, 6: $$\frac{N_u \cdot \sqrt{D^2 \cdot F^2 \cdot (A+C)^2} \cdot (A + C - A \cdot D + A \cdot D \cdot F)}{D \cdot F \cdot (A+C) \cdot \sqrt{N_u{}^2 \cdot [A + C + A \cdot D \cdot (F-1)]^2}}$$

0, 2, 3, 4, 0, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot F^2 \cdot (C+1)^2} \cdot (B - D + B \cdot C + D \cdot F)}{B \cdot D \cdot F \cdot (C+1) \cdot \sqrt{N_u{}^2 \cdot [B \cdot (C+1) + D \cdot (F-1)]^2}}$$

1, 2, 3, 4, 0, 6: $$\frac{N_u \cdot (A \cdot B - A \cdot D + B \cdot C + A \cdot D \cdot F) \cdot \sqrt{B^2 \cdot D^2 \cdot F^2 \cdot (A+C)^2}}{B \cdot D \cdot F \cdot (A+C) \cdot \sqrt{N_u{}^2 \cdot [B \cdot (A+C) + A \cdot D \cdot (F-1)]^2}}$$

0, 0, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{F^2} \cdot (E + F)}{F \cdot \sqrt{N_u{}^2 \cdot (E + F)^2}}$$

1, 0, 0, 0, 5, 6:

$$\frac{N_u \cdot (E + A \cdot F) \cdot \sqrt{F^2 \cdot (A + 1)^2}}{F \cdot \sqrt{N_u{}^2 \cdot [A \cdot (E - F) - E \cdot (A + 1)]^2} \cdot (A + 1)}$$

0, 2, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (F - E + 2 \cdot B \cdot E)}{B \cdot F \cdot \sqrt{N_u{}^2 \cdot (F - E + 2 \cdot B \cdot E)^2}}$$

1, 2, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{B^2 \cdot F^2 \cdot (A + 1)^2} \cdot (A \cdot F - A \cdot E + B \cdot E + A \cdot B \cdot E)}{B \cdot F \cdot (A + 1) \cdot \sqrt{N_u{}^2 \cdot [A \cdot (E - F) - B \cdot E \cdot (A + 1)]^2}}$$

0, 0, 3, 0, 5, 6:

$$\frac{N_u \cdot (F + C \cdot E) \cdot \sqrt{F^2 \cdot (C + 1)^2}}{F \cdot \sqrt{N_u{}^2 \cdot [F - E + E \cdot (C + 1)]^2} \cdot (C + 1)}$$

1, 0, 3, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{F^2 \cdot (A + C)^2} \cdot (A \cdot F + C \cdot E)}{F \cdot \sqrt{N_u{}^2 \cdot [E \cdot (A + C) - A \cdot (E - F)]^2} \cdot (A + C)}$$

0, 2, 3, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{B^2 \cdot F^2 \cdot (C + 1)^2} \cdot (F - E + B \cdot E + B \cdot C \cdot E)}{B \cdot F \cdot (C + 1) \cdot \sqrt{N_u{}^2 \cdot [F - E + B \cdot E \cdot (C + 1)]^2}}$$

1, 2, 3, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{B^2 \cdot F^2 \cdot (A + C)^2} \cdot (A \cdot F - A \cdot E + A \cdot B \cdot E + B \cdot C \cdot E)}{B \cdot F \cdot (A + C) \cdot \sqrt{N_u{}^2 \cdot [A \cdot (E - F) - B \cdot E \cdot (A + C)]^2}}$$

0, 0, 0, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{D^2 \cdot F^2} \cdot (2 \cdot E - D \cdot E + D \cdot F)}{D \cdot F \cdot \sqrt{N_u{}^2 \cdot [2 \cdot E - D \cdot (E - F)]^2}}$$

1, 0, 0, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{D^2 \cdot F^2 \cdot (A + 1)^2} \cdot (E + A \cdot E - A \cdot D \cdot E + A \cdot D \cdot F)}{D \cdot F \cdot (A + 1) \cdot \sqrt{N_u{}^2 \cdot [E \cdot (A + 1) - A \cdot D \cdot (E - F)]^2}}$$

0, 2, 0, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot F^2} \cdot (2 \cdot B \cdot E - D \cdot E + D \cdot F)}{B \cdot D \cdot F \cdot \sqrt{N_u{}^2 \cdot [D \cdot (E - F) - 2 \cdot B \cdot E]^2}}$$

1, 2, 0, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot F^2 \cdot (A + 1)^2} \cdot (B \cdot E + A \cdot B \cdot E - A \cdot D \cdot E + A \cdot D \cdot F)}{B \cdot D \cdot F \cdot (A + 1) \cdot \sqrt{N_u{}^2 \cdot [B \cdot E \cdot (A + 1) - A \cdot D \cdot (E - F)]^2}}$$

0, 0, 3, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{D^2 \cdot F^2 \cdot (C + 1)^2} \cdot (E + C \cdot E - D \cdot E + D \cdot F)}{D \cdot F \cdot \sqrt{N_u{}^2 \cdot [D \cdot (E - F) - E \cdot (C + 1)]^2} \cdot (C + 1)}$$

1, 0, 3, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{D^2 \cdot F^2 \cdot (A + C)^2} \cdot (A \cdot E + C \cdot E - A \cdot D \cdot E + A \cdot D \cdot F)}{D \cdot F \cdot (A + C) \cdot \sqrt{N_u{}^2 \cdot [E \cdot (A + C) - A \cdot D \cdot (E - F)]^2}}$$

0, 2, 3, 4, 5, 6:

$$\frac{N_u \cdot (B \cdot E - D \cdot E + D \cdot F + B \cdot C \cdot E) \cdot \sqrt{B^2 \cdot D^2 \cdot F^2 \cdot (C + 1)^2}}{B \cdot D \cdot F \cdot (C + 1) \cdot \sqrt{N_u{}^2 \cdot [D \cdot (E - F) - B \cdot E \cdot (C + 1)]^2}}$$

1, 2, 3, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot F^2 \cdot (A + C)^2} \cdot (A \cdot B \cdot E - A \cdot D \cdot E + B \cdot C \cdot E + A \cdot D \cdot F)}{B \cdot D \cdot F \cdot (A + C) \cdot \sqrt{N_u{}^2 \cdot [B \cdot E \cdot (A + C) - A \cdot D \cdot (E - F)]^2}}$$

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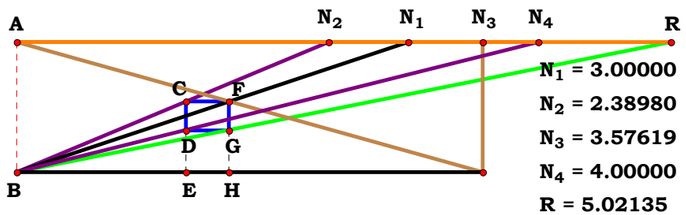


Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 2.38980$ $N_3 := 3.57619$ $N_4 := 4$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ **An invisible Variable.**

Descriptions.

$\frac{B \cdot N_u}{A \cdot D} = 5.021341$ $Num := \frac{B \cdot N_u}{\sqrt{(B \cdot N_u)^2}}$ $Den := \frac{A \cdot D}{\sqrt{(A \cdot D)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{B \cdot N_u \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{B^2 \cdot N_u^2}} = 0$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

0, 0, 0, 4: $\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2}}$

1, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2}}$

1, 0, 0, 4: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{N_u^2}}$

0, 2, 0, 0: $\frac{B \cdot N_u}{\sqrt{B^2 \cdot N_u^2}}$

0, 2, 0, 4: $\frac{B \cdot N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 4: $\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 0: $\frac{N_u}{\sqrt{N_u^2}}$

0, 0, 3, 4: $\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2}}$

1, 0, 3, 0: $\frac{N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2}}$

1, 0, 3, 4: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{N_u^2}}$

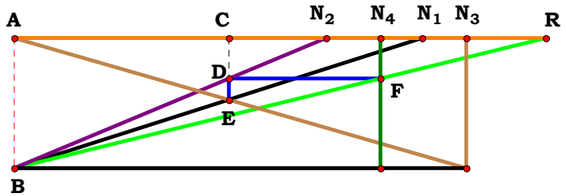
0, 2, 3, 0: $\frac{B \cdot N_u}{\sqrt{B^2 \cdot N_u^2}}$

0, 2, 3, 4: $\frac{B \cdot N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 3, 0: $\frac{B \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 3, 4: $\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{B^2 \cdot N_u^2}}$

1CST5R6



$N_1 = 3.12592$
$N_2 = 2.38980$
$N_3 = 3.46965$
$N_4 = 2.80865$
$R = 4.08176$

Unit. $AB := 1$ Given. $N_1 := 3.12592$ $N_2 := 2.38980$ $N_3 := 3.46965$ $N_4 := 2.80865$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A + C)}{B \cdot D} = 4.081765$$

$$Num := \frac{N_u \cdot (A + C)}{\sqrt{\left[N_u \cdot (A + C)\right]^2}}$$

$$Den := \frac{B \cdot D}{\sqrt{(B \cdot D)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot (A + C)}{B \cdot D \cdot \sqrt{{N_u}^2 \cdot (A + C)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0: $\frac{N_u \cdot (A+1)}{\sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 0, 0: $\frac{N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2}}$

1, 2, 0, 0: $\frac{N_u \cdot (A+1) \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 0, 3, 0: $\frac{N_u \cdot (C+1)}{\sqrt{N_u^2 \cdot (C+1)^2}}$

1, 0, 3, 0: $\frac{N_u \cdot (A+C)}{\sqrt{N_u^2 \cdot (A+C)^2}}$

0, 2, 3, 0: $\frac{N_u \cdot (C+1) \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2 \cdot (C+1)^2}}$

1, 2, 3, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot (A+C)}{B \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$

0, 0, 0, 4: $\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2}}$

1, 0, 0, 4: $\frac{N_u \cdot (A+1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 0, 4: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2}}{B \cdot D \cdot \sqrt{N_u^2}}$

1, 2, 0, 4: $\frac{N_u \cdot (A+1) \cdot \sqrt{B^2 \cdot D^2}}{B \cdot D \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

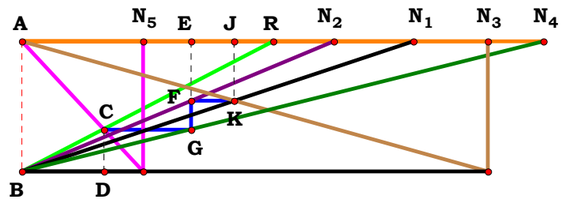
0, 0, 3, 4: $\frac{N_u \cdot (C+1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (C+1)^2}}$

1, 0, 3, 4: $\frac{N_u \cdot \sqrt{D^2} \cdot (A+C)}{D \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$

0, 2, 3, 4: $\frac{N_u \cdot (C+1) \cdot \sqrt{B^2 \cdot D^2}}{B \cdot D \cdot \sqrt{N_u^2 \cdot (C+1)^2}}$

1, 2, 3, 4: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot (A+C)}{B \cdot D \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$

1CST5R7



$N_1 = 3.00000$
$N_2 = 2.38980$
$N_3 = 3.57619$
$N_4 = 4.00000$
$N_5 = 0.92984$
$R = 1.93209$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 2.38980$ $N_3 := 3.57619$ $N_4 := 4$

$N_5 := .92984$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot E} = 1.932099$$

$$Num := \frac{N_u \cdot (A \cdot B - A \cdot D + B \cdot C)}{\sqrt{\left[N_u \cdot (A \cdot B - A \cdot D + B \cdot C)\right]^2}}$$

$$Den := \frac{A \cdot D \cdot E}{\sqrt{(A \cdot D \cdot E)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{Num}{Den} = 1$$

$$L - \frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2} \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot E \cdot \sqrt{N_u{}^2 \cdot (A \cdot B - A \cdot D + B \cdot C)^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 0: $\frac{N_u \cdot (2 \cdot B - 1)}{\sqrt{N_u^2 \cdot (2 \cdot B - 1)^2}}$

1, 2, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (B - A + A \cdot B)}{A \cdot \sqrt{N_u^2 \cdot (B - A + A \cdot B)^2}}$

0, 0, 3, 0, 0: $\frac{C \cdot N_u}{\sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 0: $\frac{C \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 0, 0: $\frac{N_u \cdot (B + B \cdot C - 1)}{\sqrt{N_u^2 \cdot (B + B \cdot C - 1)^2}}$

1, 2, 3, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (A \cdot B - A + B \cdot C)}{A \cdot \sqrt{N_u^2 \cdot (A \cdot B - A + B \cdot C)^2}}$

0, 0, 0, 4, 0: $-\frac{N_u \cdot (D - 2) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (D - 2)^2}}$

1, 0, 0, 4, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A - A \cdot D + 1)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A - A \cdot D + 1)^2}}$

0, 2, 0, 4, 0: $-\frac{N_u \cdot \sqrt{D^2} \cdot (D - 2 \cdot B)}{D \cdot \sqrt{N_u^2 \cdot (D - 2 \cdot B)^2}}$

1, 2, 0, 4, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (B + A \cdot B - A \cdot D)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (B + A \cdot B - A \cdot D)^2}}$

0, 0, 3, 4, 0: $\frac{N_u \cdot \sqrt{D^2} \cdot (C - D + 1)}{D \cdot \sqrt{N_u^2 \cdot (C - D + 1)^2}}$

1, 0, 3, 4, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A + C - A \cdot D)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A + C - A \cdot D)^2}}$

0, 2, 3, 4, 0: $\frac{N_u \cdot \sqrt{D^2} \cdot (B - D + B \cdot C)}{D \cdot \sqrt{N_u^2 \cdot (B - D + B \cdot C)^2}}$

1, 2, 3, 4, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A \cdot B - A \cdot D + B \cdot C)^2}}$

0, 0, 0, 0, 5: $$\frac{N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u{}^2}}$$

1, 0, 0, 0, 5: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{N_u{}^2}}$$

0, 2, 0, 0, 5: $$\frac{N_u \cdot \sqrt{E^2} \cdot (2 \cdot B - 1)}{E \cdot \sqrt{N_u{}^2 \cdot (2 \cdot B - 1)^2}}$$

1, 2, 0, 0, 5: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (B - A + A \cdot B)}{A \cdot E \cdot \sqrt{N_u{}^2 \cdot (B - A + A \cdot B)^2}}$$

0, 0, 3, 0, 5: $$\frac{C \cdot N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{C^2 \cdot N_u{}^2}}$$

1, 0, 3, 0, 5: $$\frac{C \cdot N_u \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{C^2 \cdot N_u{}^2}}$$

0, 2, 3, 0, 5: $$\frac{N_u \cdot \sqrt{E^2} \cdot (B + B \cdot C - 1)}{E \cdot \sqrt{N_u{}^2 \cdot (B + B \cdot C - 1)^2}}$$

1, 2, 3, 0, 5: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A \cdot B - A + B \cdot C)}{A \cdot E \cdot \sqrt{N_u{}^2 \cdot (A \cdot B - A + B \cdot C)^2}}$$

0, 0, 0, 4, 5: $$-\frac{N_u \cdot (D - 2) \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{N_u{}^2 \cdot (D - 2)^2}}$$

1, 0, 0, 4, 5: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2} \cdot (A - A \cdot D + 1)}{A \cdot D \cdot E \cdot \sqrt{N_u{}^2 \cdot (A - A \cdot D + 1)^2}}$$

0, 2, 0, 4, 5: $$-\frac{N_u \cdot \sqrt{D^2 \cdot E^2} \cdot (D - 2 \cdot B)}{D \cdot E \cdot \sqrt{N_u{}^2 \cdot (D - 2 \cdot B)^2}}$$

1, 2, 0, 4, 5: $$\frac{N_u \cdot (B + A \cdot B - A \cdot D) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{N_u{}^2 \cdot (B + A \cdot B - A \cdot D)^2}}$$

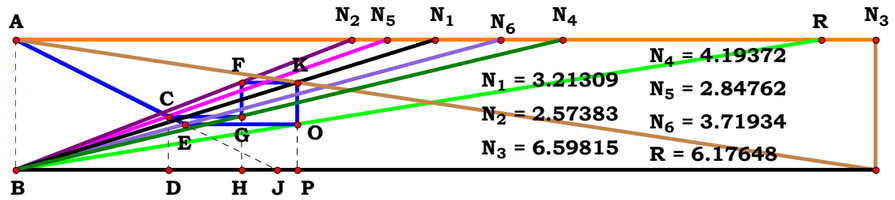
0, 0, 3, 4, 5: $$\frac{N_u \cdot \sqrt{D^2 \cdot E^2} \cdot (C - D + 1)}{D \cdot E \cdot \sqrt{N_u{}^2 \cdot (C - D + 1)^2}}$$

1, 0, 3, 4, 5: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2} \cdot (A + C - A \cdot D)}{A \cdot D \cdot E \cdot \sqrt{N_u{}^2 \cdot (A + C - A \cdot D)^2}}$$

0, 2, 3, 4, 5: $$\frac{N_u \cdot \sqrt{D^2 \cdot E^2} \cdot (B - D + B \cdot C)}{D \cdot E \cdot \sqrt{N_u{}^2 \cdot (B - D + B \cdot C)^2}}$$

1, 2, 3, 4, 5: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2} \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot E \cdot \sqrt{N_u{}^2 \cdot (A \cdot B - A \cdot D + B \cdot C)^2}}$$

1CST5R8



Unit. $AB := 1$ Given. $N_1 := 3.21309$ $N_2 := 2.57383$ $N_3 := 6.59815$

$N_4 := 4.19372$ $N_5 := 2.84762$ $N_6 := 3.71934$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u \cdot [A \cdot E \cdot (B - D) + B \cdot C \cdot E + A \cdot D \cdot F]}{A \cdot D \cdot F \cdot (A + C)} = 6.176477$$

$$Num := \frac{N_u \cdot [A \cdot E \cdot (B - D) + B \cdot C \cdot E + A \cdot D \cdot F]}{\sqrt{\left[N_u \cdot [A \cdot E \cdot (B - D) + B \cdot C \cdot E + A \cdot D \cdot F]\right]^2}}$$

$$Den := \frac{A \cdot D \cdot F \cdot (A + C)}{\sqrt{[A \cdot D \cdot F \cdot (A + C)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot (A \cdot B \cdot E - A \cdot D \cdot E + B \cdot C \cdot E + A \cdot D \cdot F) \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot (A + C)^2}}{A \cdot D \cdot F \cdot \sqrt{N_u^2 \cdot [B \cdot C \cdot E + A \cdot D \cdot F + A \cdot E \cdot (B - D)]^2} \cdot (A + C)} = 0$$

For 6 variables there are 64 subsets.

0, 0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot (A+1)^2}}{A \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 0, 0, 0, 0: $\frac{B \cdot N_u}{\sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 0, 0: $\frac{N_u \cdot (B + A \cdot B) \cdot \sqrt{A^2 \cdot (A+1)^2}}{A \cdot (A+1) \cdot \sqrt{N_u^2 \cdot [A + B + A \cdot (B-1)]^2}}$

0, 0, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{(C+1)^2}}{\sqrt{N_u^2 \cdot (C+1)^2}}$

1, 0, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot (A+C)^2}}{A \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$

0, 2, 3, 0, 0, 0: $\frac{N_u \cdot (B + B \cdot C) \cdot \sqrt{(C+1)^2}}{(C+1) \cdot \sqrt{N_u^2 \cdot (B + B \cdot C)^2}}$

1, 2, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot (A+C)^2} \cdot (A \cdot B + B \cdot C)}{A \cdot \sqrt{N_u^2 \cdot [A + B \cdot C + A \cdot (B-1)]^2} \cdot (A+C)}$

0, 0, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2}}$

1, 0, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot (A+1)^2}}{A \cdot D \cdot \sqrt{N_u^2 \cdot [A \cdot D - A \cdot (D-1) + 1]^2}}$

0, 2, 0, 4, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 4, 0, 0: $\frac{N_u \cdot (B + A \cdot B) \cdot \sqrt{A^2 \cdot D^2 \cdot (A+1)^2}}{A \cdot D \cdot (A+1) \cdot \sqrt{N_u^2 \cdot [B + A \cdot D + A \cdot (B-D)]^2}}$

0, 0, 3, 4, 0, 0: $\frac{N_u \cdot \sqrt{D^2 \cdot (C+1)^2}}{D \cdot \sqrt{N_u^2 \cdot (C+1)^2}}$

1, 0, 3, 4, 0, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot (A+C)^2}}{A \cdot D \cdot \sqrt{N_u^2 \cdot [C + A \cdot D - A \cdot (D-1)]^2}}$

0, 2, 3, 4, 0, 0: $\frac{N_u \cdot (B + B \cdot C) \cdot \sqrt{D^2 \cdot (C+1)^2}}{D \cdot (C+1) \cdot \sqrt{N_u^2 \cdot (B + B \cdot C)^2}}$

1, 2, 3, 4, 0, 0: $\frac{N_u \cdot (A \cdot B + B \cdot C) \cdot \sqrt{A^2 \cdot D^2 \cdot (A+C)^2}}{A \cdot D \cdot (A+C) \cdot \sqrt{N_u^2 \cdot [A \cdot D + B \cdot C + A \cdot (B-D)]^2}}$

0, 0, 0, 0, 5, 0: $$\frac{N_u \cdot (E+1)}{\sqrt{N_u^{\,2} \cdot (E+1)^2}}$$

1, 0, 0, 0, 5, 0: $$\frac{N_u \cdot (A+E) \cdot \sqrt{A^2 \cdot (A+1)^2}}{A \cdot \sqrt{N_u^{\,2} \cdot (A+E)^2} \cdot (A+1)}$$

0, 2, 0, 0, 5, 0: $$\frac{N_u \cdot (2 \cdot B \cdot E - E + 1)}{\sqrt{N_u^{\,2} \cdot [B \cdot E + E \cdot (B-1) + 1]^2}}$$

1, 2, 0, 0, 5, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot (A+1)^2} \cdot (A - A \cdot E + B \cdot E + A \cdot B \cdot E)}{A \cdot (A+1) \cdot \sqrt{N_u^{\,2} \cdot [A + B \cdot E + A \cdot E \cdot (B-1)]^2}}$$

0, 0, 3, 0, 5, 0: $$\frac{N_u \cdot \sqrt{(C+1)^2} \cdot (C \cdot E + 1)}{(C+1) \cdot \sqrt{N_u^{\,2} \cdot (C \cdot E + 1)^2}}$$

1, 0, 3, 0, 5, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot (A+C)^2} \cdot (A + C \cdot E)}{A \cdot (A+C) \cdot \sqrt{N_u^{\,2} \cdot (A + C \cdot E)^2}}$$

0, 2, 3, 0, 5, 0: $$\frac{N_u \cdot \sqrt{(C+1)^2} \cdot (B \cdot E - E + B \cdot C \cdot E + 1)}{(C+1) \cdot \sqrt{N_u^{\,2} \cdot [E \cdot (B-1) + B \cdot C \cdot E + 1]^2}}$$

1, 2, 3, 0, 5, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot (A+C)^2} \cdot (A - A \cdot E + A \cdot B \cdot E + B \cdot C \cdot E)}{A \cdot (A+C) \cdot \sqrt{N_u^{\,2} \cdot [A + A \cdot E \cdot (B-1) + B \cdot C \cdot E]^2}}$$

0, 0, 0, 4, 5, 0: $$\frac{N_u \cdot \sqrt{D^2} \cdot (D + 2 \cdot E - D \cdot E)}{D \cdot \sqrt{N_u^{\,2} \cdot [D + E - E \cdot (D-1)]^2}}$$

1, 0, 0, 4, 5, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot (A+1)^2} \cdot (E + A \cdot D + A \cdot E - A \cdot D \cdot E)}{A \cdot D \cdot (A+1) \cdot \sqrt{N_u^{\,2} \cdot [E + A \cdot D - A \cdot E \cdot (D-1)]^2}}$$

0, 2, 0, 4, 5, 0: $$\frac{N_u \cdot \sqrt{D^2} \cdot (D + 2 \cdot B \cdot E - D \cdot E)}{D \cdot \sqrt{N_u^{\,2} \cdot [D + B \cdot E + E \cdot (B-D)]^2}}$$

1, 2, 0, 4, 5, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot (A+1)^2} \cdot (A \cdot D + B \cdot E + A \cdot B \cdot E - A \cdot D \cdot E)}{A \cdot D \cdot (A+1) \cdot \sqrt{N_u^{\,2} \cdot [A \cdot D + B \cdot E + A \cdot E \cdot (B-D)]^2}}$$

0, 0, 3, 4, 5, 0: $$\frac{N_u \cdot \sqrt{D^2 \cdot (C+1)^2} \cdot (D + E + C \cdot E - D \cdot E)}{D \cdot (C+1) \cdot \sqrt{N_u^{\,2} \cdot [D + C \cdot E - E \cdot (D-1)]^2}}$$

1, 0, 3, 4, 5, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot (A+C)^2} \cdot (A \cdot D + A \cdot E + C \cdot E - A \cdot D \cdot E)}{A \cdot D \cdot \sqrt{N_u^{\,2} \cdot [A \cdot D + C \cdot E - A \cdot E \cdot (D-1)]^2} \cdot (A+C)}$$

0, 2, 3, 4, 5, 0: $$\frac{N_u \cdot \sqrt{D^2 \cdot (C+1)^2} \cdot (D + B \cdot E - D \cdot E + B \cdot C \cdot E)}{D \cdot \sqrt{N_u^{\,2} \cdot [D + E \cdot (B-D) + B \cdot C \cdot E]^2} \cdot (C+1)}$$

1, 2, 3, 4, 5, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot (A+C)^2} \cdot (A \cdot D + A \cdot B \cdot E - A \cdot D \cdot E + B \cdot C \cdot E)}{A \cdot D \cdot \sqrt{N_u^{\,2} \cdot [A \cdot D + B \cdot C \cdot E + A \cdot E \cdot (B-D)]^2} \cdot (A+C)}$$

0, 0, 0, 0, 0, 6: $$\frac{N_u \cdot (F+1) \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u{}^2 \cdot (F+1)^2}}$$

1, 0, 0, 0, 0, 6: $$\frac{N_u \cdot (A \cdot F+1) \cdot \sqrt{A^2 \cdot F^2 \cdot (A+1)^2}}{A \cdot F \cdot (A+1) \cdot \sqrt{N_u{}^2 \cdot (A \cdot F+1)^2}}$$

0, 2, 0, 0, 0, 6: $$\frac{N_u \cdot \sqrt{F^2} \cdot (2 \cdot B+F-1)}{F \cdot \sqrt{N_u{}^2 \cdot (2 \cdot B+F-1)^2}}$$

1, 2, 0, 0, 0, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot F^2 \cdot (A+1)^2} \cdot (B-A+A \cdot B+A \cdot F)}{A \cdot F \cdot (A+1) \cdot \sqrt{N_u{}^2 \cdot [B+A \cdot F+A \cdot (B-1)]^2}}$$

0, 0, 3, 0, 0, 6: $$\frac{N_u \cdot (C+F) \cdot \sqrt{F^2 \cdot (C+1)^2}}{F \cdot \sqrt{N_u{}^2 \cdot (C+F)^2} \cdot (C+1)}$$

1, 0, 3, 0, 0, 6: $$\frac{N_u \cdot (C+A \cdot F) \cdot \sqrt{A^2 \cdot F^2 \cdot (A+C)^2}}{A \cdot F \cdot (A+C) \cdot \sqrt{N_u{}^2 \cdot (C+A \cdot F)^2}}$$

0, 2, 3, 0, 0, 6: $$\frac{N_u \cdot \sqrt{F^2 \cdot (C+1)^2} \cdot (B+F+B \cdot C-1)}{F \cdot \sqrt{N_u{}^2 \cdot (B+F+B \cdot C-1)^2} \cdot (C+1)}$$

1, 2, 3, 0, 0, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot F^2 \cdot (A+C)^2} \cdot (A \cdot B-A+B \cdot C+A \cdot F)}{A \cdot F \cdot (A+C) \cdot \sqrt{N_u{}^2 \cdot [B \cdot C+A \cdot F+A \cdot (B-1)]^2}}$$

0, 0, 0, 4, 0, 6: $$\frac{N_u \cdot \sqrt{D^2 \cdot F^2} \cdot (D \cdot F-D+2)}{D \cdot F \cdot \sqrt{N_u{}^2 \cdot (D \cdot F-D+2)^2}}$$

1, 0, 0, 4, 0, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot (A+1)^2} \cdot (A-A \cdot D+A \cdot D \cdot F+1)}{A \cdot D \cdot F \cdot (A+1) \cdot \sqrt{N_u{}^2 \cdot [A \cdot D \cdot F-A \cdot (D-1)+1]^2}}$$

0, 2, 0, 4, 0, 6: $$\frac{N_u \cdot \sqrt{D^2 \cdot F^2} \cdot (2 \cdot B-D+D \cdot F)}{D \cdot F \cdot \sqrt{N_u{}^2 \cdot (2 \cdot B-D+D \cdot F)^2}}$$

1, 2, 0, 4, 0, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot (A+1)^2} \cdot (B+A \cdot B-A \cdot D+A \cdot D \cdot F)}{A \cdot D \cdot F \cdot \sqrt{N_u{}^2 \cdot [B+A \cdot (B-D)+A \cdot D \cdot F]^2} \cdot (A+1)}$$

0, 0, 3, 4, 0, 6: $$\frac{N_u \cdot \sqrt{D^2 \cdot F^2 \cdot (C+1)^2} \cdot (C-D+D \cdot F+1)}{D \cdot F \cdot (C+1) \cdot \sqrt{N_u{}^2 \cdot (C-D+D \cdot F+1)^2}}$$

1, 0, 3, 4, 0, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot (A+C)^2} \cdot (A+C-A \cdot D+A \cdot D \cdot F)}{A \cdot D \cdot F \cdot (A+C) \cdot \sqrt{N_u{}^2 \cdot [C-A \cdot (D-1)+A \cdot D \cdot F]^2}}$$

0, 2, 3, 4, 0, 6: $$\frac{N_u \cdot \sqrt{D^2 \cdot F^2 \cdot (C+1)^2} \cdot (B-D+B \cdot C+D \cdot F)}{D \cdot F \cdot (C+1) \cdot \sqrt{N_u{}^2 \cdot (B-D+B \cdot C+D \cdot F)^2}}$$

1, 2, 3, 4, 0, 6: $$\frac{N_u \cdot (A \cdot B-A \cdot D+B \cdot C+A \cdot D \cdot F) \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot (A+C)^2}}{A \cdot D \cdot F \cdot (A+C) \cdot \sqrt{N_u{}^2 \cdot [B \cdot C+A \cdot (B-D)+A \cdot D \cdot F]^2}}$$

0, 0, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{F^2} \cdot (E + F)}{F \cdot \sqrt{N_u{}^2 \cdot (E + F)^2}}$$

1, 0, 0, 0, 5, 6:

$$\frac{N_u \cdot (E + A \cdot F) \cdot \sqrt{A^2 \cdot F^2 \cdot (A + 1)^2}}{A \cdot F \cdot (A + 1) \cdot \sqrt{N_u{}^2 \cdot (E + A \cdot F)^2}}$$

0, 2, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{F^2} \cdot (F - E + 2 \cdot B \cdot E)}{F \cdot \sqrt{N_u{}^2 \cdot [F + B \cdot E + E \cdot (B - 1)]^2}}$$

1, 2, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{A^2 \cdot F^2 \cdot (A + 1)^2} \cdot (A \cdot F - A \cdot E + B \cdot E + A \cdot B \cdot E)}{A \cdot F \cdot \sqrt{N_u{}^2 \cdot [A \cdot F + B \cdot E + A \cdot E \cdot (B - 1)]^2} \cdot (A + 1)}$$

0, 0, 3, 0, 5, 6:

$$\frac{N_u \cdot (F + C \cdot E) \cdot \sqrt{F^2 \cdot (C + 1)^2}}{F \cdot (C + 1) \cdot \sqrt{N_u{}^2 \cdot (F + C \cdot E)^2}}$$

1, 0, 3, 0, 5, 6:

$$\frac{N_u \cdot (A \cdot F + C \cdot E) \cdot \sqrt{A^2 \cdot F^2 \cdot (A + C)^2}}{A \cdot F \cdot (A + C) \cdot \sqrt{N_u{}^2 \cdot (A \cdot F + C \cdot E)^2}}$$

0, 2, 3, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{F^2 \cdot (C + 1)^2} \cdot (F - E + B \cdot E + B \cdot C \cdot E)}{F \cdot (C + 1) \cdot \sqrt{N_u{}^2 \cdot [F + E \cdot (B - 1) + B \cdot C \cdot E]^2}}$$

1, 2, 3, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{A^2 \cdot F^2 \cdot (A + C)^2} \cdot (A \cdot F - A \cdot E + A \cdot B \cdot E + B \cdot C \cdot E)}{A \cdot F \cdot \sqrt{N_u{}^2 \cdot [A \cdot F + A \cdot E \cdot (B - 1) + B \cdot C \cdot E]^2} \cdot (A + C)}$$

0, 0, 0, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{D^2 \cdot F^2} \cdot (2 \cdot E - D \cdot E + D \cdot F)}{D \cdot F \cdot \sqrt{N_u{}^2 \cdot [E + D \cdot F - E \cdot (D - 1)]^2}}$$

1, 0, 0, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot (A + 1)^2} \cdot (E + A \cdot E - A \cdot D \cdot E + A \cdot D \cdot F)}{A \cdot D \cdot F \cdot (A + 1) \cdot \sqrt{N_u{}^2 \cdot [E - A \cdot E \cdot (D - 1) + A \cdot D \cdot F]^2}}$$

0, 2, 0, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{D^2 \cdot F^2} \cdot (2 \cdot B \cdot E - D \cdot E + D \cdot F)}{D \cdot F \cdot \sqrt{N_u{}^2 \cdot [B \cdot E + D \cdot F + E \cdot (B - D)]^2}}$$

1, 2, 0, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot (A + 1)^2} \cdot (B \cdot E + A \cdot B \cdot E - A \cdot D \cdot E + A \cdot D \cdot F)}{A \cdot D \cdot F \cdot \sqrt{N_u{}^2 \cdot [B \cdot E + A \cdot D \cdot F + A \cdot E \cdot (B - D)]^2} \cdot (A + 1)}$$

0, 0, 3, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{D^2 \cdot F^2 \cdot (C + 1)^2} \cdot (E + C \cdot E - D \cdot E + D \cdot F)}{D \cdot F \cdot (C + 1) \cdot \sqrt{N_u{}^2 \cdot [C \cdot E + D \cdot F - E \cdot (D - 1)]^2}}$$

1, 0, 3, 4, 5, 6:

$$\frac{N_u \cdot (A \cdot E + C \cdot E - A \cdot D \cdot E + A \cdot D \cdot F) \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot (A + C)^2}}{A \cdot D \cdot F \cdot \sqrt{N_u{}^2 \cdot [C \cdot E - A \cdot E \cdot (D - 1) + A \cdot D \cdot F]^2} \cdot (A + C)}$$

0, 2, 3, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{D^2 \cdot F^2 \cdot (C + 1)^2} \cdot (B \cdot E - D \cdot E + D \cdot F + B \cdot C \cdot E)}{D \cdot F \cdot (C + 1) \cdot \sqrt{N_u{}^2 \cdot [D \cdot F + E \cdot (B - D) + B \cdot C \cdot E]^2}}$$

1, 2, 3, 4, 5, 6:

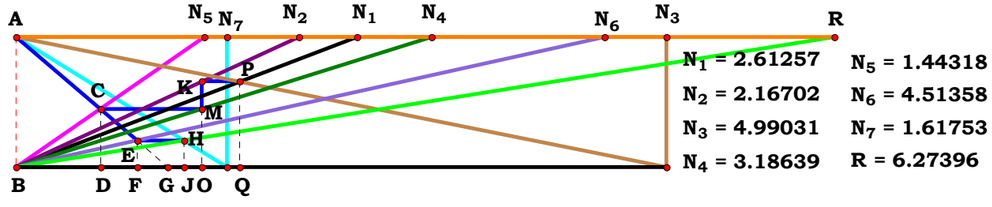
$$\frac{N_u \cdot (A \cdot B \cdot E - A \cdot D \cdot E + B \cdot C \cdot E + A \cdot D \cdot F) \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot (A + C)^2}}{A \cdot D \cdot F \cdot \sqrt{N_u{}^2 \cdot [B \cdot C \cdot E + A \cdot D \cdot F + A \cdot E \cdot (B - D)]^2} \cdot (A + C)}$$

1CST5R9

Unit. $AB := 1$ Given. $N_1 := 2.61257$ $N_2 := 2.16702$ $N_3 := 4.99031$ $N_4 := 3.18639$

$N_5 := 1.44318$ $N_6 := 4.51358$ $N_7 := 1.61753$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$



Descriptions.

$$\frac{E \cdot N_u \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot F \cdot G} = 6.273998$$

$$Num := \frac{E \cdot N_u \cdot (A \cdot B - A \cdot D + B \cdot C)}{\sqrt{\left[E \cdot N_u \cdot (A \cdot B - A \cdot D + B \cdot C)\right]^2}}$$

$$Den := \frac{A \cdot D \cdot F \cdot G}{\sqrt{(A \cdot D \cdot F \cdot G)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{E \cdot N_u \cdot (A \cdot B - A \cdot D + B \cdot C) \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot G^2}}{A \cdot D \cdot F \cdot G \cdot \sqrt{E^2 \cdot N_u{}^2 \cdot (A \cdot B - A \cdot D + B \cdot C)^2}} = 0$$

For 7 variables there are 128 subsets.

0, 0, 0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 0, 0, 0: $\frac{N_u \cdot (2 \cdot B - 1)}{\sqrt{N_u^2 \cdot (2 \cdot B - 1)^2}}$

1, 2, 0, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (B - A + A \cdot B)}{A \cdot \sqrt{N_u^2 \cdot (B - A + A \cdot B)^2}}$

0, 0, 3, 0, 0, 0, 0: $\frac{C \cdot N_u}{\sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 0, 0, 0: $\frac{C \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 0, 0, 0, 0: $\frac{N_u \cdot (B + B \cdot C - 1)}{\sqrt{N_u^2 \cdot (B + B \cdot C - 1)^2}}$

1, 2, 3, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (A \cdot B - A + B \cdot C)}{A \cdot \sqrt{N_u^2 \cdot (A \cdot B - A + B \cdot C)^2}}$

0, 0, 0, 4, 0, 0, 0: $-\frac{N_u \cdot (D - 2) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (D - 2)^2}}$

1, 0, 0, 4, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A - A \cdot D + 1)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A - A \cdot D + 1)^2}}$

0, 2, 0, 4, 0, 0, 0: $-\frac{N_u \cdot \sqrt{D^2} \cdot (D - 2 \cdot B)}{D \cdot \sqrt{N_u^2 \cdot (D - 2 \cdot B)^2}}$

1, 2, 0, 4, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (B + A \cdot B - A \cdot D)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (B + A \cdot B - A \cdot D)^2}}$

0, 0, 3, 4, 0, 0, 0: $\frac{N_u \cdot \sqrt{D^2} \cdot (C - D + 1)}{D \cdot \sqrt{N_u^2 \cdot (C - D + 1)^2}}$

1, 0, 3, 4, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A + C - A \cdot D)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A + C - A \cdot D)^2}}$

0, 2, 3, 4, 0, 0, 0: $\frac{N_u \cdot \sqrt{D^2} \cdot (B - D + B \cdot C)}{D \cdot \sqrt{N_u^2 \cdot (B - D + B \cdot C)^2}}$

1, 2, 3, 4, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A \cdot B - A \cdot D + B \cdot C)^2}}$

0, 0, 0, 0, 5, 0, 0: $$\frac{E \cdot N_u}{\sqrt{E^2 \cdot {N_u}^2}}$$

1, 0, 0, 0, 5, 0, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{E^2 \cdot {N_u}^2}}$$

0, 2, 0, 0, 5, 0, 0: $$\frac{E \cdot N_u \cdot (2 \cdot B - 1)}{\sqrt{E^2 \cdot {N_u}^2 \cdot (2 \cdot B - 1)^2}}$$

1, 2, 0, 0, 5, 0, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2} \cdot (B - A + A \cdot B)}{A \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B - A + A \cdot B)^2}}$$

0, 0, 3, 0, 5, 0, 0: $$\frac{C \cdot E \cdot N_u}{\sqrt{C^2 \cdot E^2 \cdot {N_u}^2}}$$

1, 0, 3, 0, 5, 0, 0: $$\frac{C \cdot E \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{C^2 \cdot E^2 \cdot {N_u}^2}}$$

0, 2, 3, 0, 5, 0, 0: $$\frac{E \cdot N_u \cdot (B + B \cdot C - 1)}{\sqrt{E^2 \cdot {N_u}^2 \cdot (B + B \cdot C - 1)^2}}$$

1, 2, 3, 0, 5, 0, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2} \cdot (A \cdot B - A + B \cdot C)}{A \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A \cdot B - A + B \cdot C)^2}}$$

0, 0, 0, 4, 5, 0, 0: $$-\frac{E \cdot N_u \cdot (D - 2) \cdot \sqrt{D^2}}{D \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (D - 2)^2}}$$

1, 0, 0, 4, 5, 0, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A - A \cdot D + 1)}{A \cdot D \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A - A \cdot D + 1)^2}}$$

0, 2, 0, 4, 5, 0, 0: $$-\frac{E \cdot N_u \cdot \sqrt{D^2} \cdot (D - 2 \cdot B)}{D \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (D - 2 \cdot B)^2}}$$

1, 2, 0, 4, 5, 0, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (B + A \cdot B - A \cdot D)}{A \cdot D \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B + A \cdot B - A \cdot D)^2}}$$

0, 0, 3, 4, 5, 0, 0: $$\frac{E \cdot N_u \cdot \sqrt{D^2} \cdot (C - D + 1)}{D \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (C - D + 1)^2}}$$

1, 0, 3, 4, 5, 0, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A + C - A \cdot D)}{A \cdot D \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A + C - A \cdot D)^2}}$$

0, 2, 3, 4, 5, 0, 0: $$\frac{E \cdot N_u \cdot \sqrt{D^2} \cdot (B - D + B \cdot C)}{D \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B - D + B \cdot C)^2}}$$

1, 2, 3, 4, 5, 0, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A \cdot B - A \cdot D + B \cdot C)^2}}$$

0, 0, 0, 0, 0, 6, 0: $$\frac{N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u^2}}$$

1, 0, 0, 0, 0, 6, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot F^2}}{A \cdot F \cdot \sqrt{N_u^2}}$$

0, 2, 0, 0, 0, 6, 0: $$\frac{N_u \cdot \sqrt{F^2} \cdot (2 \cdot B - 1)}{F \cdot \sqrt{N_u^2 \cdot (2 \cdot B - 1)^2}}$$

1, 2, 0, 0, 0, 6, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (B - A + A \cdot B)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (B - A + A \cdot B)^2}}$$

0, 0, 3, 0, 0, 6, 0: $$\frac{C \cdot N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{C^2 \cdot N_u^2}}$$

1, 0, 3, 0, 0, 6, 0: $$\frac{C \cdot N_u \cdot \sqrt{A^2 \cdot F^2}}{A \cdot F \cdot \sqrt{C^2 \cdot N_u^2}}$$

0, 2, 3, 0, 0, 6, 0: $$\frac{N_u \cdot \sqrt{F^2} \cdot (B + B \cdot C - 1)}{F \cdot \sqrt{N_u^2 \cdot (B + B \cdot C - 1)^2}}$$

1, 2, 3, 0, 0, 6, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (A \cdot B - A + B \cdot C)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (A \cdot B - A + B \cdot C)^2}}$$

0, 0, 0, 4, 0, 6, 0: $$-\frac{N_u \cdot (D - 2) \cdot \sqrt{D^2 \cdot F^2}}{D \cdot F \cdot \sqrt{N_u^2 \cdot (D - 2)^2}}$$

1, 0, 0, 4, 0, 6, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot F^2} \cdot (A - A \cdot D + 1)}{A \cdot D \cdot F \cdot \sqrt{N_u^2 \cdot (A - A \cdot D + 1)^2}}$$

0, 2, 0, 4, 0, 6, 0: $$-\frac{N_u \cdot \sqrt{D^2 \cdot F^2} \cdot (D - 2 \cdot B)}{D \cdot F \cdot \sqrt{N_u^2 \cdot (D - 2 \cdot B)^2}}$$

1, 2, 0, 4, 0, 6, 0: $$\frac{N_u \cdot (B + A \cdot B - A \cdot D) \cdot \sqrt{A^2 \cdot D^2 \cdot F^2}}{A \cdot D \cdot F \cdot \sqrt{N_u^2 \cdot (B + A \cdot B - A \cdot D)^2}}$$

0, 0, 3, 4, 0, 6, 0: $$\frac{N_u \cdot \sqrt{D^2 \cdot F^2} \cdot (C - D + 1)}{D \cdot F \cdot \sqrt{N_u^2 \cdot (C - D + 1)^2}}$$

1, 0, 3, 4, 0, 6, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot F^2} \cdot (A + C - A \cdot D)}{A \cdot D \cdot F \cdot \sqrt{N_u^2 \cdot (A + C - A \cdot D)^2}}$$

0, 2, 3, 4, 0, 6, 0: $$\frac{N_u \cdot \sqrt{D^2 \cdot F^2} \cdot (B - D + B \cdot C)}{D \cdot F \cdot \sqrt{N_u^2 \cdot (B - D + B \cdot C)^2}}$$

1, 2, 3, 4, 0, 6, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot F^2} \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot F \cdot \sqrt{N_u^2 \cdot (A \cdot B - A \cdot D + B \cdot C)^2}}$$

0, 0, 0, 0, 5, 6, 0: $$\frac{E \cdot N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{E^2 \cdot {N_u}^2}}$$

1, 0, 0, 0, 5, 6, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot F^2}}{A \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2}}$$

0, 2, 0, 0, 5, 6, 0: $$\frac{E \cdot N_u \cdot \sqrt{F^2} \cdot (2 \cdot B - 1)}{F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (2 \cdot B - 1)^2}}$$

1, 2, 0, 0, 5, 6, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (B - A + A \cdot B)}{A \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B - A + A \cdot B)^2}}$$

0, 0, 3, 0, 5, 6, 0: $$\frac{C \cdot E \cdot N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{C^2 \cdot E^2 \cdot {N_u}^2}}$$

1, 0, 3, 0, 5, 6, 0: $$\frac{C \cdot E \cdot N_u \cdot \sqrt{A^2 \cdot F^2}}{A \cdot F \cdot \sqrt{C^2 \cdot E^2 \cdot {N_u}^2}}$$

0, 2, 3, 0, 5, 6, 0: $$\frac{E \cdot N_u \cdot \sqrt{F^2} \cdot (B + B \cdot C - 1)}{F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B + B \cdot C - 1)^2}}$$

1, 2, 3, 0, 5, 6, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (A \cdot B - A + B \cdot C)}{A \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A \cdot B - A + B \cdot C)^2}}$$

0, 0, 0, 4, 5, 6, 0: $$-\frac{E \cdot N_u \cdot (D - 2) \cdot \sqrt{D^2 \cdot F^2}}{D \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (D - 2)^2}}$$

1, 0, 0, 4, 5, 6, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot D^2 \cdot F^2} \cdot (A - A \cdot D + 1)}{A \cdot D \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A - A \cdot D + 1)^2}}$$

0, 2, 0, 4, 5, 6, 0: $$-\frac{E \cdot N_u \cdot \sqrt{D^2 \cdot F^2} \cdot (D - 2 \cdot B)}{D \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (D - 2 \cdot B)^2}}$$

1, 2, 0, 4, 5, 6, 0: $$\frac{E \cdot N_u \cdot (B + A \cdot B - A \cdot D) \cdot \sqrt{A^2 \cdot D^2 \cdot F^2}}{A \cdot D \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B + A \cdot B - A \cdot D)^2}}$$

0, 0, 3, 4, 5, 6, 0: $$\frac{E \cdot N_u \cdot \sqrt{D^2 \cdot F^2} \cdot (C - D + 1)}{D \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (C - D + 1)^2}}$$

1, 0, 3, 4, 5, 6, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot D^2 \cdot F^2} \cdot (A + C - A \cdot D)}{A \cdot D \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A + C - A \cdot D)^2}}$$

0, 2, 3, 4, 5, 6, 0: $$\frac{E \cdot N_u \cdot \sqrt{D^2 \cdot F^2} \cdot (B - D + B \cdot C)}{D \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B - D + B \cdot C)^2}}$$

1, 2, 3, 4, 5, 6, 0: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot D^2 \cdot F^2} \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A \cdot B - A \cdot D + B \cdot C)^2}}$$

0, 0, 0, 0, 0, 0, 7: $\frac{N_u \cdot \sqrt{G^2}}{G \cdot \sqrt{N_u^2}}$

1, 0, 0, 0, 0, 0, 7: $\frac{N_u \cdot \sqrt{A^2 \cdot G^2}}{A \cdot G \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 0, 0, 7: $\frac{N_u \cdot \sqrt{G^2} \cdot (2 \cdot B - 1)}{G \cdot \sqrt{N_u^2 \cdot (2 \cdot B - 1)^2}}$

1, 2, 0, 0, 0, 0, 7: $\frac{N_u \cdot \sqrt{A^2 \cdot G^2} \cdot (B - A + A \cdot B)}{A \cdot G \cdot \sqrt{N_u^2 \cdot (B - A + A \cdot B)^2}}$

0, 0, 3, 0, 0, 0, 7: $\frac{C \cdot N_u \cdot \sqrt{G^2}}{G \cdot \sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 0, 0, 7: $\frac{C \cdot N_u \cdot \sqrt{A^2 \cdot G^2}}{A \cdot G \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 0, 0, 0, 7: $\frac{N_u \cdot \sqrt{G^2} \cdot (B + B \cdot C - 1)}{G \cdot \sqrt{N_u^2 \cdot (B + B \cdot C - 1)^2}}$

1, 2, 3, 0, 0, 0, 7: $\frac{N_u \cdot \sqrt{A^2 \cdot G^2} \cdot (A \cdot B - A + B \cdot C)}{A \cdot G \cdot \sqrt{N_u^2 \cdot (A \cdot B - A + B \cdot C)^2}}$

0, 0, 0, 4, 0, 0, 7: $-\frac{N_u \cdot (D - 2) \cdot \sqrt{D^2 \cdot G^2}}{D \cdot G \cdot \sqrt{N_u^2 \cdot (D - 2)^2}}$

1, 0, 0, 4, 0, 0, 7: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot G^2} \cdot (A - A \cdot D + 1)}{A \cdot D \cdot G \cdot \sqrt{N_u^2 \cdot (A - A \cdot D + 1)^2}}$

0, 2, 0, 4, 0, 0, 7: $-\frac{N_u \cdot \sqrt{D^2 \cdot G^2} \cdot (D - 2 \cdot B)}{D \cdot G \cdot \sqrt{N_u^2 \cdot (D - 2 \cdot B)^2}}$

1, 2, 0, 4, 0, 0, 7: $\frac{N_u \cdot (B + A \cdot B - A \cdot D) \cdot \sqrt{A^2 \cdot D^2 \cdot G^2}}{A \cdot D \cdot G \cdot \sqrt{N_u^2 \cdot (B + A \cdot B - A \cdot D)^2}}$

0, 0, 3, 4, 0, 0, 7: $\frac{N_u \cdot \sqrt{D^2 \cdot G^2} \cdot (C - D + 1)}{D \cdot G \cdot \sqrt{N_u^2 \cdot (C - D + 1)^2}}$

1, 0, 3, 4, 0, 0, 7: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot G^2} \cdot (A + C - A \cdot D)}{A \cdot D \cdot G \cdot \sqrt{N_u^2 \cdot (A + C - A \cdot D)^2}}$

0, 2, 3, 4, 0, 0, 7: $\frac{N_u \cdot \sqrt{D^2 \cdot G^2} \cdot (B - D + B \cdot C)}{D \cdot G \cdot \sqrt{N_u^2 \cdot (B - D + B \cdot C)^2}}$

1, 2, 3, 4, 0, 0, 7: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot G^2} \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot G \cdot \sqrt{N_u^2 \cdot (A \cdot B - A \cdot D + B \cdot C)^2}}$

0, 0, 0, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{G^2}}{G \cdot \sqrt{E^2 \cdot {N_u}^2}}$$

1, 0, 0, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot G^2}}{A \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2}}$$

0, 2, 0, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{G^2} \cdot (2 \cdot B - 1)}{G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (2 \cdot B - 1)^2}}$$

1, 2, 0, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot G^2} \cdot (B - A + A \cdot B)}{A \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B - A + A \cdot B)^2}}$$

0, 0, 3, 0, 5, 0, 7: $$\frac{C \cdot E \cdot N_u \cdot \sqrt{G^2}}{G \cdot \sqrt{C^2 \cdot E^2 \cdot {N_u}^2}}$$

1, 0, 3, 0, 5, 0, 7: $$\frac{C \cdot E \cdot N_u \cdot \sqrt{A^2 \cdot G^2}}{A \cdot G \cdot \sqrt{C^2 \cdot E^2 \cdot {N_u}^2}}$$

0, 2, 3, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{G^2} \cdot (B + B \cdot C - 1)}{G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B + B \cdot C - 1)^2}}$$

1, 2, 3, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot G^2} \cdot (A \cdot B - A + B \cdot C)}{A \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A \cdot B - A + B \cdot C)^2}}$$

0, 0, 0, 4, 5, 0, 7: $$-\frac{E \cdot N_u \cdot (D - 2) \cdot \sqrt{D^2 \cdot G^2}}{D \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (D - 2)^2}}$$

1, 0, 0, 4, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot D^2 \cdot G^2} \cdot (A - A \cdot D + 1)}{A \cdot D \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A - A \cdot D + 1)^2}}$$

0, 2, 0, 4, 5, 0, 7: $$-\frac{E \cdot N_u \cdot \sqrt{D^2 \cdot G^2} \cdot (D - 2 \cdot B)}{D \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (D - 2 \cdot B)^2}}$$

1, 2, 0, 4, 5, 0, 7: $$\frac{E \cdot N_u \cdot (B + A \cdot B - A \cdot D) \cdot \sqrt{A^2 \cdot D^2 \cdot G^2}}{A \cdot D \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B + A \cdot B - A \cdot D)^2}}$$

0, 0, 3, 4, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{D^2 \cdot G^2} \cdot (C - D + 1)}{D \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (C - D + 1)^2}}$$

1, 0, 3, 4, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot D^2 \cdot G^2} \cdot (A + C - A \cdot D)}{A \cdot D \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A + C - A \cdot D)^2}}$$

0, 2, 3, 4, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{D^2 \cdot G^2} \cdot (B - D + B \cdot C)}{D \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B - D + B \cdot C)^2}}$$

1, 2, 3, 4, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot D^2 \cdot G^2} \cdot (A \cdot B - A \cdot D + B \cdot C)}{A \cdot D \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A \cdot B - A \cdot D + B \cdot C)^2}}$$

$$0,\,0,\,0,\,0,\,0,\,6,\,7:\quad \frac{N_u\cdot\sqrt{F^2\cdot G^2}}{F\cdot G\cdot\sqrt{N_u^{\,2}}}$$

$$1,\,0,\,0,\,0,\,0,\,6,\,7:\quad \frac{N_u\cdot\sqrt{A^2\cdot F^2\cdot G^2}}{A\cdot F\cdot G\cdot\sqrt{N_u^{\,2}}}$$

$$0,\,2,\,0,\,0,\,0,\,6,\,7:\quad \frac{N_u\cdot\sqrt{F^2\cdot G^2}\cdot(2\cdot B-1)}{F\cdot G\cdot\sqrt{N_u^{\,2}\cdot(2\cdot B-1)^2}}$$

$$1,\,2,\,0,\,0,\,0,\,6,\,7:\quad \frac{N_u\cdot\sqrt{A^2\cdot F^2\cdot G^2}\cdot(B-A+A\cdot B)}{A\cdot F\cdot G\cdot\sqrt{N_u^{\,2}\cdot(B-A+A\cdot B)^2}}$$

$$0,\,0,\,3,\,0,\,0,\,6,\,7:\quad \frac{C\cdot N_u\cdot\sqrt{F^2\cdot G^2}}{F\cdot G\cdot\sqrt{C^2\cdot N_u^{\,2}}}$$

$$1,\,0,\,3,\,0,\,0,\,6,\,7:\quad \frac{C\cdot N_u\cdot\sqrt{A^2\cdot F^2\cdot G^2}}{A\cdot F\cdot G\cdot\sqrt{C^2\cdot N_u^{\,2}}}$$

$$0,\,2,\,3,\,0,\,0,\,6,\,7:\quad \frac{N_u\cdot\sqrt{F^2\cdot G^2}\cdot(B+B\cdot C-1)}{F\cdot G\cdot\sqrt{N_u^{\,2}\cdot(B+B\cdot C-1)^2}}$$

$$1,\,2,\,3,\,0,\,0,\,6,\,7:\quad \frac{N_u\cdot\sqrt{A^2\cdot F^2\cdot G^2}\cdot(A\cdot B-A+B\cdot C)}{A\cdot F\cdot G\cdot\sqrt{N_u^{\,2}\cdot(A\cdot B-A+B\cdot C)^2}}$$

$$0,\,0,\,0,\,4,\,0,\,6,\,7:\quad -\frac{N_u\cdot(D-2)\cdot\sqrt{D^2\cdot F^2\cdot G^2}}{D\cdot F\cdot G\cdot\sqrt{N_u^{\,2}\cdot(D-2)^2}}$$

$$1,\,0,\,0,\,4,\,0,\,6,\,7:\quad \frac{N_u\cdot(A-A\cdot D+1)\cdot\sqrt{A^2\cdot D^2\cdot F^2\cdot G^2}}{A\cdot D\cdot F\cdot G\cdot\sqrt{N_u^{\,2}\cdot(A-A\cdot D+1)^2}}$$

$$0,\,2,\,0,\,4,\,0,\,6,\,7:\quad -\frac{N_u\cdot(D-2\cdot B)\cdot\sqrt{D^2\cdot F^2\cdot G^2}}{D\cdot F\cdot G\cdot\sqrt{N_u^{\,2}\cdot(D-2\cdot B)^2}}$$

$$1,\,2,\,0,\,4,\,0,\,6,\,7:\quad \frac{N_u\cdot(B+A\cdot B-A\cdot D)\cdot\sqrt{A^2\cdot D^2\cdot F^2\cdot G^2}}{A\cdot D\cdot F\cdot G\cdot\sqrt{N_u^{\,2}\cdot(B+A\cdot B-A\cdot D)^2}}$$

$$0,\,0,\,3,\,4,\,0,\,6,\,7:\quad \frac{N_u\cdot\sqrt{D^2\cdot F^2\cdot G^2}\cdot(C-D+1)}{D\cdot F\cdot G\cdot\sqrt{N_u^{\,2}\cdot(C-D+1)^2}}$$

$$1,\,0,\,3,\,4,\,0,\,6,\,7:\quad \frac{N_u\cdot(A+C-A\cdot D)\cdot\sqrt{A^2\cdot D^2\cdot F^2\cdot G^2}}{A\cdot D\cdot F\cdot G\cdot\sqrt{N_u^{\,2}\cdot(A+C-A\cdot D)^2}}$$

$$0,\,2,\,3,\,4,\,0,\,6,\,7:\quad \frac{N_u\cdot\sqrt{D^2\cdot F^2\cdot G^2}\cdot(B-D+B\cdot C)}{D\cdot F\cdot G\cdot\sqrt{N_u^{\,2}\cdot(B-D+B\cdot C)^2}}$$

$$1,\,2,\,3,\,4,\,0,\,6,\,7:\quad \frac{N_u\cdot(A\cdot B-A\cdot D+B\cdot C)\cdot\sqrt{A^2\cdot D^2\cdot F^2\cdot G^2}}{A\cdot D\cdot F\cdot G\cdot\sqrt{N_u^{\,2}\cdot(A\cdot B-A\cdot D+B\cdot C)^2}}$$

0, 0, 0, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot \sqrt{F^2 \cdot G^2}}{F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2}}$$

1, 0, 0, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot F^2 \cdot G^2}}{A \cdot F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2}}$$

0, 2, 0, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot \sqrt{F^2 \cdot G^2} \cdot (2 \cdot B - 1)}{F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (2 \cdot B - 1)^2}}$$

1, 2, 0, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot F^2 \cdot G^2} \cdot (B - A + A \cdot B)}{A \cdot F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B - A + A \cdot B)^2}}$$

0, 0, 3, 0, 5, 6, 7: $$\frac{C \cdot E \cdot N_u \cdot \sqrt{F^2 \cdot G^2}}{F \cdot G \cdot \sqrt{C^2 \cdot E^2 \cdot {N_u}^2}}$$

1, 0, 3, 0, 5, 6, 7: $$\frac{C \cdot E \cdot N_u \cdot \sqrt{A^2 \cdot F^2 \cdot G^2}}{A \cdot F \cdot G \cdot \sqrt{C^2 \cdot E^2 \cdot {N_u}^2}}$$

0, 2, 3, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot \sqrt{F^2 \cdot G^2} \cdot (B + B \cdot C - 1)}{F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B + B \cdot C - 1)^2}}$$

1, 2, 3, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot \sqrt{A^2 \cdot F^2 \cdot G^2} \cdot (A \cdot B - A + B \cdot C)}{A \cdot F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A \cdot B - A + B \cdot C)^2}}$$

0, 0, 0, 4, 5, 6, 7: $$-\frac{E \cdot N_u \cdot (D - 2) \cdot \sqrt{D^2 \cdot F^2 \cdot G^2}}{D \cdot F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (D - 2)^2}}$$

1, 0, 0, 4, 5, 6, 7: $$\frac{E \cdot N_u \cdot (A - A \cdot D + 1) \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot G^2}}{A \cdot D \cdot F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A - A \cdot D + 1)^2}}$$

0, 2, 0, 4, 5, 6, 7: $$-\frac{E \cdot N_u \cdot (D - 2 \cdot B) \cdot \sqrt{D^2 \cdot F^2 \cdot G^2}}{D \cdot F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (D - 2 \cdot B)^2}}$$

1, 2, 0, 4, 5, 6, 7: $$\frac{E \cdot N_u \cdot (B + A \cdot B - A \cdot D) \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot G^2}}{A \cdot D \cdot F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B + A \cdot B - A \cdot D)^2}}$$

0, 0, 3, 4, 5, 6, 7: $$\frac{E \cdot N_u \cdot \sqrt{D^2 \cdot F^2 \cdot G^2} \cdot (C - D + 1)}{D \cdot F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (C - D + 1)^2}}$$

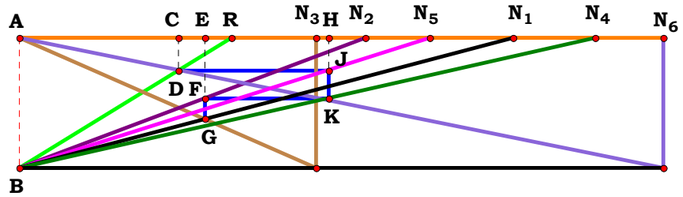
1, 0, 3, 4, 5, 6, 7: $$\frac{E \cdot N_u \cdot (A + C - A \cdot D) \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot G^2}}{A \cdot D \cdot F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A + C - A \cdot D)^2}}$$

0, 2, 3, 4, 5, 6, 7: $$\frac{E \cdot N_u \cdot \sqrt{D^2 \cdot F^2 \cdot G^2} \cdot (B - D + B \cdot C)}{D \cdot F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B - D + B \cdot C)^2}}$$

1, 2, 3, 4, 5, 6, 7: $$\frac{E \cdot N_u \cdot (A \cdot B - A \cdot D + B \cdot C) \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot G^2}}{A \cdot D \cdot F \cdot G \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A \cdot B - A \cdot D + B \cdot C)^2}}$$

1CST5R10

Unit. $AB := 1$ **Given.** $N_1 := 3.78455$ $N_2 := 2.65131$ $N_3 := 2.27829$ $N_4 := 4.41649$ $N_5 := 3.14788$ $N_6 := 4.93975$



$N_1 = 3.78455$ $N_5 = 3.14788$
$N_2 = 2.65131$ $N_6 = 4.93975$
$N_3 = 2.27829$ $R = 1.62411$
$N_4 = 4.41649$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u \cdot (A \cdot D - B \cdot E + C \cdot D)}{B \cdot E \cdot F} = 1.624109$$

$$Num := \frac{N_u \cdot (A \cdot D - B \cdot E + C \cdot D)}{\sqrt{\left[N_u \cdot (A \cdot D - B \cdot E + C \cdot D)\right]^2}}$$

$$Den := \frac{B \cdot E \cdot F}{\sqrt{(B \cdot E \cdot F)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot E^2 \cdot F^2} \cdot (A \cdot D - B \cdot E + C \cdot D)}{B \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A \cdot D - B \cdot E + C \cdot D)^2}} = 0$$

For 6 variables there are 64 subsets.

0, 0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0, 0: $\frac{A \cdot N_u}{\sqrt{A^2 \cdot N_u^2}}$

0, 2, 0, 0, 0, 0: $-\frac{N_u \cdot (B-2) \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2 \cdot (B-2)^2}}$

1, 2, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot (A-B+1)}{B \cdot \sqrt{N_u^2 \cdot (A-B+1)^2}}$

0, 0, 3, 0, 0, 0: $\frac{C \cdot N_u}{\sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 0, 0: $\frac{N_u \cdot (A+C-1)}{\sqrt{N_u^2 \cdot (A+C-1)^2}}$

0, 2, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot (C-B+1)}{B \cdot \sqrt{N_u^2 \cdot (C-B+1)^2}}$

1, 2, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot (A-B+C)}{B \cdot \sqrt{N_u^2 \cdot (A-B+C)^2}}$

0, 0, 0, 4, 0, 0: $\frac{N_u \cdot (2 \cdot D-1)}{\sqrt{N_u^2 \cdot (2 \cdot D-1)^2}}$

1, 0, 0, 4, 0, 0: $\frac{N_u \cdot (D+A \cdot D-1)}{\sqrt{N_u^2 \cdot (D+A \cdot D-1)^2}}$

0, 2, 0, 4, 0, 0: $-\frac{N_u \cdot \sqrt{B^2} \cdot (B-2 \cdot D)}{B \cdot \sqrt{N_u^2 \cdot (B-2 \cdot D)^2}}$

1, 2, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot (D-B+A \cdot D)}{B \cdot \sqrt{N_u^2 \cdot (D-B+A \cdot D)^2}}$

0, 0, 3, 4, 0, 0: $\frac{N_u \cdot (D+C \cdot D-1)}{\sqrt{N_u^2 \cdot (D+C \cdot D-1)^2}}$

1, 0, 3, 4, 0, 0: $\frac{N_u \cdot (A \cdot D+C \cdot D-1)}{\sqrt{N_u^2 \cdot (A \cdot D+C \cdot D-1)^2}}$

0, 2, 3, 4, 0, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot (D-B+C \cdot D)}{B \cdot \sqrt{N_u^2 \cdot (D-B+C \cdot D)^2}}$

1, 2, 3, 4, 0, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot (A \cdot D-B+C \cdot D)}{B \cdot \sqrt{N_u^2 \cdot (A \cdot D-B+C \cdot D)^2}}$

0, 0, 0, 0, 5, 0: $$-\frac{N_u \cdot (E-2) \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u{}^2 \cdot (E-2)^2}}$$

0, 0, 0, 4, 5, 0: $$-\frac{N_u \cdot \sqrt{E^2} \cdot (E-2 \cdot D)}{E \cdot \sqrt{N_u{}^2 \cdot (E-2 \cdot D)^2}}$$

1, 0, 0, 0, 5, 0: $$\frac{N_u \cdot \sqrt{E^2} \cdot (A-E+1)}{E \cdot \sqrt{N_u{}^2 \cdot (A-E+1)^2}}$$

1, 0, 0, 4, 5, 0: $$\frac{N_u \cdot \sqrt{E^2} \cdot (D-E+A \cdot D)}{E \cdot \sqrt{N_u{}^2 \cdot (D-E+A \cdot D)^2}}$$

0, 2, 0, 0, 5, 0: $$-\frac{N_u \cdot \sqrt{B^2 \cdot E^2} \cdot (B \cdot E-2)}{B \cdot E \cdot \sqrt{N_u{}^2 \cdot (B \cdot E-2)^2}}$$

0, 2, 0, 4, 5, 0: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2} \cdot (2 \cdot D-B \cdot E)}{B \cdot E \cdot \sqrt{N_u{}^2 \cdot (2 \cdot D-B \cdot E)^2}}$$

1, 2, 0, 0, 5, 0: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2} \cdot (A-B \cdot E+1)}{B \cdot E \cdot \sqrt{N_u{}^2 \cdot (A-B \cdot E+1)^2}}$$

1, 2, 0, 4, 5, 0: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2} \cdot (D+A \cdot D-B \cdot E)}{B \cdot E \cdot \sqrt{N_u{}^2 \cdot (D+A \cdot D-B \cdot E)^2}}$$

0, 0, 3, 0, 5, 0: $$\frac{N_u \cdot \sqrt{E^2} \cdot (C-E+1)}{E \cdot \sqrt{N_u{}^2 \cdot (C-E+1)^2}}$$

0, 0, 3, 4, 5, 0: $$\frac{N_u \cdot \sqrt{E^2} \cdot (D-E+C \cdot D)}{E \cdot \sqrt{N_u{}^2 \cdot (D-E+C \cdot D)^2}}$$

1, 0, 3, 0, 5, 0: $$\frac{N_u \cdot \sqrt{E^2} \cdot (A+C-E)}{E \cdot \sqrt{N_u{}^2 \cdot (A+C-E)^2}}$$

1, 0, 3, 4, 5, 0: $$\frac{N_u \cdot \sqrt{E^2} \cdot (A \cdot D-E+C \cdot D)}{E \cdot \sqrt{N_u{}^2 \cdot (A \cdot D-E+C \cdot D)^2}}$$

0, 2, 3, 0, 5, 0: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2} \cdot (C-B \cdot E+1)}{B \cdot E \cdot \sqrt{N_u{}^2 \cdot (C-B \cdot E+1)^2}}$$

0, 2, 3, 4, 5, 0: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2} \cdot (D-B \cdot E+C \cdot D)}{B \cdot E \cdot \sqrt{N_u{}^2 \cdot (D-B \cdot E+C \cdot D)^2}}$$

1, 2, 3, 0, 5, 0: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2} \cdot (A+C-B \cdot E)}{B \cdot E \cdot \sqrt{N_u{}^2 \cdot (A+C-B \cdot E)^2}}$$

1, 2, 3, 4, 5, 0: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2} \cdot (A \cdot D-B \cdot E+C \cdot D)}{B \cdot E \cdot \sqrt{N_u{}^2 \cdot (A \cdot D-B \cdot E+C \cdot D)^2}}$$

0, 0, 0, 0, 0, 6: $\frac{N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u^2}}$

1, 0, 0, 0, 0, 6: $\frac{A \cdot N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{A^2 \cdot N_u^2}}$

0, 2, 0, 0, 0, 6: $-\frac{N_u \cdot (B-2) \cdot \sqrt{B^2 \cdot F^2}}{B \cdot F \cdot \sqrt{N_u^2 \cdot (B-2)^2}}$

1, 2, 0, 0, 0, 6: $\frac{N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (A-B+1)}{B \cdot F \cdot \sqrt{N_u^2 \cdot (A-B+1)^2}}$

0, 0, 3, 0, 0, 6: $\frac{C \cdot N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (A+C-1)}{F \cdot \sqrt{N_u^2 \cdot (A+C-1)^2}}$

0, 2, 3, 0, 0, 6: $\frac{N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (C-B+1)}{B \cdot F \cdot \sqrt{N_u^2 \cdot (C-B+1)^2}}$

1, 2, 3, 0, 0, 6: $\frac{N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (A-B+C)}{B \cdot F \cdot \sqrt{N_u^2 \cdot (A-B+C)^2}}$

0, 0, 0, 4, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (2 \cdot D-1)}{F \cdot \sqrt{N_u^2 \cdot (2 \cdot D-1)^2}}$

1, 0, 0, 4, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (D+A \cdot D-1)}{F \cdot \sqrt{N_u^2 \cdot (D+A \cdot D-1)^2}}$

0, 2, 0, 4, 0, 6: $-\frac{N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (B-2 \cdot D)}{B \cdot F \cdot \sqrt{N_u^2 \cdot (B-2 \cdot D)^2}}$

1, 2, 0, 4, 0, 6: $\frac{N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (D-B+A \cdot D)}{B \cdot F \cdot \sqrt{N_u^2 \cdot (D-B+A \cdot D)^2}}$

0, 0, 3, 4, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (D+C \cdot D-1)}{F \cdot \sqrt{N_u^2 \cdot (D+C \cdot D-1)^2}}$

1, 0, 3, 4, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (A \cdot D+C \cdot D-1)}{F \cdot \sqrt{N_u^2 \cdot (A \cdot D+C \cdot D-1)^2}}$

0, 2, 3, 4, 0, 6: $\frac{N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (D-B+C \cdot D)}{B \cdot F \cdot \sqrt{N_u^2 \cdot (D-B+C \cdot D)^2}}$

1, 2, 3, 4, 0, 6: $\frac{N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (A \cdot D-B+C \cdot D)}{B \cdot F \cdot \sqrt{N_u^2 \cdot (A \cdot D-B+C \cdot D)^2}}$

0, 0, 0, 0, 5, 6: $$-\frac{N_u \cdot (E-2) \cdot \sqrt{E^2 \cdot F^2}}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (E-2)^2}}$$

0, 0, 0, 4, 5, 6: $$-\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (E-2 \cdot D)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (E-2 \cdot D)^2}}$$

1, 0, 0, 0, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (A-E+1)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A-E+1)^2}}$$

1, 0, 0, 4, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (D-E+A \cdot D)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (D-E+A \cdot D)^2}}$$

0, 2, 0, 0, 5, 6: $$-\frac{N_u \cdot (B \cdot E-2) \cdot \sqrt{B^2 \cdot E^2 \cdot F^2}}{B \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (B \cdot E-2)^2}}$$

0, 2, 0, 4, 5, 6: $$\frac{N_u \cdot (2 \cdot D-B \cdot E) \cdot \sqrt{B^2 \cdot E^2 \cdot F^2}}{B \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (2 \cdot D-B \cdot E)^2}}$$

1, 2, 0, 0, 5, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2 \cdot F^2} \cdot (A-B \cdot E+1)}{B \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A-B \cdot E+1)^2}}$$

1, 2, 0, 4, 5, 6: $$\frac{N_u \cdot (D+A \cdot D-B \cdot E) \cdot \sqrt{B^2 \cdot E^2 \cdot F^2}}{B \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (D+A \cdot D-B \cdot E)^2}}$$

0, 0, 3, 0, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (C-E+1)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (C-E+1)^2}}$$

0, 0, 3, 4, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (D-E+C \cdot D)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (D-E+C \cdot D)^2}}$$

1, 0, 3, 0, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (A+C-E)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A+C-E)^2}}$$

1, 0, 3, 4, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (A \cdot D-E+C \cdot D)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A \cdot D-E+C \cdot D)^2}}$$

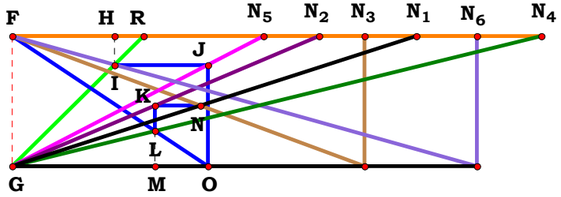
0, 2, 3, 0, 5, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2 \cdot F^2} \cdot (C-B \cdot E+1)}{B \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (C-B \cdot E+1)^2}}$$

0, 2, 3, 4, 5, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2 \cdot F^2} \cdot (D-B \cdot E+C \cdot D)}{B \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (D-B \cdot E+C \cdot D)^2}}$$

1, 2, 3, 0, 5, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2 \cdot F^2} \cdot (A+C-B \cdot E)}{B \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A+C-B \cdot E)^2}}$$

1, 2, 3, 4, 5, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2 \cdot F^2} \cdot (A \cdot D-B \cdot E+C \cdot D)}{B \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A \cdot D-B \cdot E+C \cdot D)^2}}$$

1CST5R11



$N_1 = 3.09686$ $N_5 = 1.92747$

$N_2 = 2.35105$ $N_6 = 3.56437$

$N_3 = 2.70447$ $R = 1.01103$

$N_4 = 4.05811$

Unit. $AB := 1$ Given. $N_1 := 3.09686$ $N_2 := 2.35105$ $N_3 := 2.70447$

$N_4 := 4.05811$ $N_5 := 1.92747$ $N_6 := 3.56437$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u \cdot (A \cdot B - A \cdot D + B \cdot C - A \cdot E)}{A \cdot E \cdot F} = 1.011031$$

$$Num := \frac{N_u \cdot (A \cdot B - A \cdot D + B \cdot C - A \cdot E)}{\sqrt{\left[N_u \cdot (A \cdot B - A \cdot D + B \cdot C - A \cdot E)\right]^2}}$$

$$Den := \frac{A \cdot E \cdot F}{\sqrt{(A \cdot E \cdot F)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (A \cdot B - A \cdot D + B \cdot C - A \cdot E)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A \cdot B - A \cdot D + B \cdot C - A \cdot E)^2}} = 0$$

For 6 variables there are 64 subsets.

0, 0, 0, 0, 0, 0: 0

1, 0, 0, 0, 0, 0: $-\frac{N_u \cdot (A-1) \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2 \cdot (A-1)^2}}$

0, 2, 0, 0, 0, 0: $\frac{N_u \cdot (2 \cdot B - 2)}{\sqrt{N_u^2 \cdot (2 \cdot B - 2)^2}}$

1, 2, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (B - 2 \cdot A + A \cdot B)}{A \cdot \sqrt{N_u^2 \cdot (B - 2 \cdot A + A \cdot B)^2}}$

0, 0, 3, 0, 0, 0: $\frac{N_u \cdot (C-1)}{\sqrt{N_u^2 \cdot (C-1)^2}}$

1, 0, 3, 0, 0, 0: $-\frac{N_u \cdot \sqrt{A^2} \cdot (A-C)}{A \cdot \sqrt{N_u^2 \cdot (A-C)^2}}$

0, 2, 3, 0, 0, 0: $\frac{N_u \cdot (B + B \cdot C - 2)}{\sqrt{N_u^2 \cdot (B + B \cdot C - 2)^2}}$

1, 2, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (A \cdot B - 2 \cdot A + B \cdot C)}{A \cdot \sqrt{N_u^2 \cdot (A \cdot B - 2 \cdot A + B \cdot C)^2}}$

0, 0, 0, 4, 0, 0: $-\frac{N_u \cdot (D-1)}{\sqrt{N_u^2 \cdot (D-1)^2}}$

1, 0, 0, 4, 0, 0: $-\frac{N_u \cdot \sqrt{A^2} \cdot (A \cdot D - 1)}{A \cdot \sqrt{N_u^2 \cdot (A \cdot D - 1)^2}}$

0, 2, 0, 4, 0, 0: $-\frac{N_u \cdot (D - 2 \cdot B + 1)}{\sqrt{N_u^2 \cdot (D - 2 \cdot B + 1)^2}}$

1, 2, 0, 4, 0, 0: $-\frac{N_u \cdot \sqrt{A^2} \cdot (A - B - A \cdot B + A \cdot D)}{A \cdot \sqrt{N_u^2 \cdot (A - B - A \cdot B + A \cdot D)^2}}$

0, 0, 3, 4, 0, 0: $\frac{N_u \cdot (C-D)}{\sqrt{N_u^2 \cdot (C-D)^2}}$

1, 0, 3, 4, 0, 0: $\frac{N_u \cdot (C - A \cdot D) \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2 \cdot (C - A \cdot D)^2}}$

0, 2, 3, 4, 0, 0: $\frac{N_u \cdot (B - D + B \cdot C - 1)}{\sqrt{N_u^2 \cdot (B - D + B \cdot C - 1)^2}}$

1, 2, 3, 4, 0, 0: $-\frac{N_u \cdot \sqrt{A^2} \cdot (A - A \cdot B + A \cdot D - B \cdot C)}{A \cdot \sqrt{N_u^2 \cdot (A - A \cdot B + A \cdot D - B \cdot C)^2}}$

0, 0, 0, 0, 5, 0: $$-\frac{N_u \cdot (E-1) \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u^2 \cdot (E-1)^2}}$$

1, 0, 0, 0, 5, 0: $$-\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A \cdot E - 1)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A \cdot E - 1)^2}}$$

0, 2, 0, 0, 5, 0: $$-\frac{N_u \cdot \sqrt{E^2} \cdot (E - 2 \cdot B + 1)}{E \cdot \sqrt{N_u^2 \cdot (E - 2 \cdot B + 1)^2}}$$

1, 2, 0, 0, 5, 0: $$-\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A - B - A \cdot B + A \cdot E)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A - B - A \cdot B + A \cdot E)^2}}$$

0, 0, 3, 0, 5, 0: $$\frac{N_u \cdot \sqrt{E^2} \cdot (C - E)}{E \cdot \sqrt{N_u^2 \cdot (C - E)^2}}$$

1, 0, 3, 0, 5, 0: $$\frac{N_u \cdot (C - A \cdot E) \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{N_u^2 \cdot (C - A \cdot E)^2}}$$

0, 2, 3, 0, 5, 0: $$\frac{N_u \cdot \sqrt{E^2} \cdot (B - E + B \cdot C - 1)}{E \cdot \sqrt{N_u^2 \cdot (B - E + B \cdot C - 1)^2}}$$

1, 2, 3, 0, 5, 0: $$-\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A - A \cdot B - B \cdot C + A \cdot E)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A - A \cdot B - B \cdot C + A \cdot E)^2}}$$

0, 0, 0, 4, 5, 0: $$-\frac{N_u \cdot \sqrt{E^2} \cdot (D + E - 2)}{E \cdot \sqrt{N_u^2 \cdot (D + E - 2)^2}}$$

1, 0, 0, 4, 5, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A - A \cdot D - A \cdot E + 1)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A - A \cdot D - A \cdot E + 1)^2}}$$

0, 2, 0, 4, 5, 0: $$-\frac{N_u \cdot \sqrt{E^2} \cdot (D - 2 \cdot B + E)}{E \cdot \sqrt{N_u^2 \cdot (D - 2 \cdot B + E)^2}}$$

1, 2, 0, 4, 5, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (B + A \cdot B - A \cdot D - A \cdot E)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (B + A \cdot B - A \cdot D - A \cdot E)^2}}$$

0, 0, 3, 4, 5, 0: $$\frac{N_u \cdot \sqrt{E^2} \cdot (C - D - E + 1)}{E \cdot \sqrt{N_u^2 \cdot (C - D - E + 1)^2}}$$

1, 0, 3, 4, 5, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A + C - A \cdot D - A \cdot E)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A + C - A \cdot D - A \cdot E)^2}}$$

0, 2, 3, 4, 5, 0: $$\frac{N_u \cdot \sqrt{E^2} \cdot (B - D - E + B \cdot C)}{E \cdot \sqrt{N_u^2 \cdot (B - D - E + B \cdot C)^2}}$$

1, 2, 3, 4, 5, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A \cdot B - A \cdot D + B \cdot C - A \cdot E)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A \cdot B - A \cdot D + B \cdot C - A \cdot E)^2}}$$

0, 0, 0, 0, 0, 6: 0

1, 0, 0, 0, 0, 6: $-\frac{N_u \cdot (A-1) \cdot \sqrt{A^2 \cdot F^2}}{A \cdot F \cdot \sqrt{N_u^2 \cdot (A-1)^2}}$

0, 2, 0, 0, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (2 \cdot B - 2)}{F \cdot \sqrt{N_u^2 \cdot (2 \cdot B - 2)^2}}$

1, 2, 0, 0, 0, 6: $\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (B - 2 \cdot A + A \cdot B)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (B - 2 \cdot A + A \cdot B)^2}}$

0, 0, 3, 0, 0, 6: $\frac{N_u \cdot (C-1) \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u^2 \cdot (C-1)^2}}$

1, 0, 3, 0, 0, 6: $-\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (A - C)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (A-C)^2}}$

0, 2, 3, 0, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (B + B \cdot C - 2)}{F \cdot \sqrt{N_u^2 \cdot (B + B \cdot C - 2)^2}}$

1, 2, 3, 0, 0, 6: $\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (A \cdot B - 2 \cdot A + B \cdot C)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (A \cdot B - 2 \cdot A + B \cdot C)^2}}$

0, 0, 0, 4, 0, 6: $-\frac{N_u \cdot (D-1) \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u^2 \cdot (D-1)^2}}$

1, 0, 0, 4, 0, 6: $-\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (A \cdot D - 1)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (A \cdot D - 1)^2}}$

0, 2, 0, 4, 0, 6: $-\frac{N_u \cdot \sqrt{F^2} \cdot (D - 2 \cdot B + 1)}{F \cdot \sqrt{N_u^2 \cdot (D - 2 \cdot B + 1)^2}}$

1, 2, 0, 4, 0, 6: $-\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (A - B - A \cdot B + A \cdot D)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (A - B - A \cdot B + A \cdot D)^2}}$

0, 0, 3, 4, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (C - D)}{F \cdot \sqrt{N_u^2 \cdot (C-D)^2}}$

1, 0, 3, 4, 0, 6: $\frac{N_u \cdot (C - A \cdot D) \cdot \sqrt{A^2 \cdot F^2}}{A \cdot F \cdot \sqrt{N_u^2 \cdot (C - A \cdot D)^2}}$

0, 2, 3, 4, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (B - D + B \cdot C - 1)}{F \cdot \sqrt{N_u^2 \cdot (B - D + B \cdot C - 1)^2}}$

1, 2, 3, 4, 0, 6: $-\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (A - A \cdot B + A \cdot D - B \cdot C)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (A - A \cdot B + A \cdot D - B \cdot C)^2}}$

0, 0, 0, 0, 5, 6: $$-\frac{N_u \cdot (E-1) \cdot \sqrt{E^2 \cdot F^2}}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (E-1)^2}}$$

1, 0, 0, 0, 5, 6: $$-\frac{N_u \cdot (A \cdot E-1) \cdot \sqrt{A^2 \cdot E^2 \cdot F^2}}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A \cdot E-1)^2}}$$

0, 2, 0, 0, 5, 6: $$-\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (E-2 \cdot B+1)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (E-2 \cdot B+1)^2}}$$

1, 2, 0, 0, 5, 6: $$-\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (A-B-A \cdot B+A \cdot E)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A-B-A \cdot B+A \cdot E)^2}}$$

0, 0, 3, 0, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (C-E)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (C-E)^2}}$$

1, 0, 3, 0, 5, 6: $$\frac{N_u \cdot (C-A \cdot E) \cdot \sqrt{A^2 \cdot E^2 \cdot F^2}}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (C-A \cdot E)^2}}$$

0, 2, 3, 0, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (B-E+B \cdot C-1)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (B-E+B \cdot C-1)^2}}$$

1, 2, 3, 0, 5, 6: $$-\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (A-A \cdot B-B \cdot C+A \cdot E)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A-A \cdot B-B \cdot C+A \cdot E)^2}}$$

0, 0, 0, 4, 5, 6: $$-\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (D+E-2)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (D+E-2)^2}}$$

1, 0, 0, 4, 5, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (A-A \cdot D-A \cdot E+1)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A-A \cdot D-A \cdot E+1)^2}}$$

0, 2, 0, 4, 5, 6: $$-\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (D-2 \cdot B+E)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (D-2 \cdot B+E)^2}}$$

1, 2, 0, 4, 5, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (B+A \cdot B-A \cdot D-A \cdot E)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (B+A \cdot B-A \cdot D-A \cdot E)^2}}$$

0, 0, 3, 4, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (C-D-E+1)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (C-D-E+1)^2}}$$

1, 0, 3, 4, 5, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (A+C-A \cdot D-A \cdot E)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A+C-A \cdot D-A \cdot E)^2}}$$

0, 2, 3, 4, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (B-D-E+B \cdot C)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (B-D-E+B \cdot C)^2}}$$

1, 2, 3, 4, 5, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (A \cdot B-A \cdot D+B \cdot C-A \cdot E)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A \cdot B-A \cdot D+B \cdot C-A \cdot E)^2}}$$

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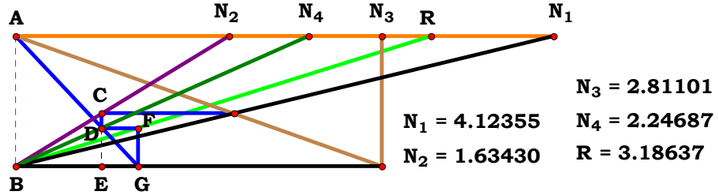


Unit. $AB := 1$ Given. $N_1 := 4.12355$ $N_2 := 1.63430$ $N_3 := 2.81101$ $N_4 := 2.24687$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B \cdot N_u \cdot (A + C)}{D \cdot (A \cdot B - A \cdot D + B \cdot C)} = 3.18636$$

$$Num := \frac{B \cdot N_u \cdot (A + C)}{\sqrt{\left[B \cdot N_u \cdot (A + C)\right]^2}}$$

$$Den := \frac{D \cdot (A \cdot B - A \cdot D + B \cdot C)}{\sqrt{\left[D \cdot (A \cdot B - A \cdot D + B \cdot C)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \sqrt{D^2 \cdot (A \cdot B - A \cdot D + B \cdot C)^2} \cdot (A + C)}{D \cdot (A \cdot B - A \cdot D + B \cdot C) \cdot \sqrt{B^2 \cdot N_u{}^2 \cdot (A + C)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $$\frac{N_u}{\sqrt{N_u^2}}$$

1, 0, 0, 0: $$\frac{N_u \cdot (A+1)}{\sqrt{N_u^2 \cdot (A+1)^2}}$$

0, 2, 0, 0: $$\frac{B \cdot N_u \cdot \sqrt{(2 \cdot B-1)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot (2 \cdot B-1)}$$

1, 2, 0, 0: $$\frac{B \cdot N_u \cdot (A+1) \cdot \sqrt{(B-A+A \cdot B)^2}}{\sqrt{B^2 \cdot N_u^2 \cdot (A+1)^2} \cdot (B-A+A \cdot B)}$$

0, 0, 3, 0: $$\frac{N_u \cdot (C+1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (C+1)^2}}$$

1, 0, 3, 0: $$\frac{N_u \cdot \sqrt{C^2} \cdot (A+C)}{C \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$$

0, 2, 3, 0: $$\frac{B \cdot N_u \cdot (C+1) \cdot \sqrt{(B+B \cdot C-1)^2}}{(B+B \cdot C-1) \cdot \sqrt{B^2 \cdot N_u^2 \cdot (C+1)^2}}$$

1, 2, 3, 0: $$\frac{B \cdot N_u \cdot (A+C) \cdot \sqrt{(A \cdot B-A+B \cdot C)^2}}{(A \cdot B-A+B \cdot C) \cdot \sqrt{B^2 \cdot N_u^2 \cdot (A+C)^2}}$$

0, 0, 0, 4: $$-\frac{N_u \cdot \sqrt{D^2 \cdot (D-2)^2}}{D \cdot (D-2) \cdot \sqrt{N_u^2}}$$

1, 0, 0, 4: $$\frac{N_u \cdot (A+1) \cdot \sqrt{D^2 \cdot (A-A \cdot D+1)^2}}{D \cdot \sqrt{N_u^2 \cdot (A+1)^2} \cdot (A-A \cdot D+1)}$$

0, 2, 0, 4: $$-\frac{B \cdot N_u \cdot \sqrt{D^2 \cdot (D-2 \cdot B)^2}}{D \cdot \sqrt{B^2 \cdot N_u^2} \cdot (D-2 \cdot B)}$$

1, 2, 0, 4: $$\frac{B \cdot N_u \cdot (A+1) \cdot \sqrt{D^2 \cdot (B+A \cdot B-A \cdot D)^2}}{D \cdot (B+A \cdot B-A \cdot D) \cdot \sqrt{B^2 \cdot N_u^2 \cdot (A+1)^2}}$$

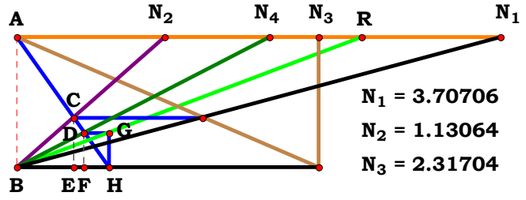
0, 0, 3, 4: $$\frac{N_u \cdot (C+1) \cdot \sqrt{D^2 \cdot (C-D+1)^2}}{D \cdot \sqrt{N_u^2 \cdot (C+1)^2} \cdot (C-D+1)}$$

1, 0, 3, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot (A+C-A \cdot D)^2} \cdot (A+C)}{D \cdot \sqrt{N_u^2 \cdot (A+C)^2} \cdot (A+C-A \cdot D)}$$

0, 2, 3, 4: $$\frac{B \cdot N_u \cdot (C+1) \cdot \sqrt{D^2 \cdot (B-D+B \cdot C)^2}}{D \cdot \sqrt{B^2 \cdot N_u^2 \cdot (C+1)^2} \cdot (B-D+B \cdot C)}$$

1, 2, 3, 4: $$\frac{B \cdot N_u \cdot \sqrt{D^2 \cdot (A \cdot B-A \cdot D+B \cdot C)^2} \cdot (A+C)}{D \cdot (A \cdot B-A \cdot D+B \cdot C) \cdot \sqrt{B^2 \cdot N_u^2 \cdot (A+C)^2}}$$

1CST5R13



$N_1 = 3.70706$ $N_4 = 1.93693$
$N_2 = 1.13064$ $R = 2.64362$
$N_3 = 2.31704$

Unit. $AB := 1$ Given. $N_1 := 3.70706$ $N_2 := 1.13064$ $N_3 := 2.31704$ $N_4 := 1.93693$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A \cdot D + B \cdot C)}{B \cdot C \cdot D} = 2.643619$$

$$Num := \frac{N_u \cdot (A \cdot D + B \cdot C)}{\sqrt{\left[N_u \cdot (A \cdot D + B \cdot C)\right]^2}}$$

$$Den := \frac{B \cdot C \cdot D}{\sqrt{(B \cdot C \cdot D)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot (A \cdot D + B \cdot C) \cdot \sqrt{B^2 \cdot C^2 \cdot D^2}}{B \cdot C \cdot D \cdot \sqrt{N_u{}^2 \cdot (A \cdot D + B \cdot C)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $$\frac{N_u}{\sqrt{N_u^2}}$$

1, 0, 0, 0: $$\frac{N_u \cdot (A+1)}{\sqrt{N_u^2 \cdot (A+1)^2}}$$

0, 2, 0, 0: $$\frac{N_u \cdot (B+1) \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2 \cdot (B+1)^2}}$$

1, 2, 0, 0: $$\frac{N_u \cdot \sqrt{B^2} \cdot (A+B)}{B \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$$

0, 0, 3, 0: $$\frac{N_u \cdot (C+1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (C+1)^2}}$$

1, 0, 3, 0: $$\frac{N_u \cdot \sqrt{C^2} \cdot (A+C)}{C \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$$

0, 2, 3, 0: $$\frac{N_u \cdot \sqrt{B^2 \cdot C^2} \cdot (B \cdot C+1)}{B \cdot C \cdot \sqrt{N_u^2 \cdot (B \cdot C+1)^2}}$$

1, 2, 3, 0: $$\frac{N_u \cdot (A+B \cdot C) \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{N_u^2 \cdot (A+B \cdot C)^2}}$$

0, 0, 0, 4: $$\frac{N_u \cdot (D+1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (D+1)^2}}$$

1, 0, 0, 4: $$\frac{N_u \cdot \sqrt{D^2} \cdot (A \cdot D+1)}{D \cdot \sqrt{N_u^2 \cdot (A \cdot D+1)^2}}$$

0, 2, 0, 4: $$\frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot (B+D)}{B \cdot D \cdot \sqrt{N_u^2 \cdot (B+D)^2}}$$

1, 2, 0, 4: $$\frac{N_u \cdot (B+A \cdot D) \cdot \sqrt{B^2 \cdot D^2}}{B \cdot D \cdot \sqrt{N_u^2 \cdot (B+A \cdot D)^2}}$$

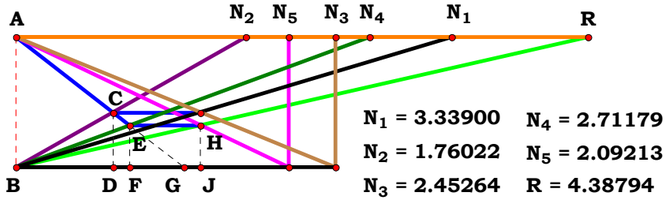
0, 0, 3, 4: $$\frac{N_u \cdot \sqrt{C^2 \cdot D^2} \cdot (C+D)}{C \cdot D \cdot \sqrt{N_u^2 \cdot (C+D)^2}}$$

1, 0, 3, 4: $$\frac{N_u \cdot (C+A \cdot D) \cdot \sqrt{C^2 \cdot D^2}}{C \cdot D \cdot \sqrt{N_u^2 \cdot (C+A \cdot D)^2}}$$

0, 2, 3, 4: $$\frac{N_u \cdot (D+B \cdot C) \cdot \sqrt{B^2 \cdot C^2 \cdot D^2}}{B \cdot C \cdot D \cdot \sqrt{N_u^2 \cdot (D+B \cdot C)^2}}$$

1, 2, 3, 4: $$\frac{N_u \cdot (A \cdot D+B \cdot C) \cdot \sqrt{B^2 \cdot C^2 \cdot D^2}}{B \cdot C \cdot D \cdot \sqrt{N_u^2 \cdot (A \cdot D+B \cdot C)^2}}$$

1CST5R14



Unit. $AB := 1$ Given. $N_1 := 3.33900$ $N_2 := 1.76022$ $N_3 := 2.45264$

$N_4 := 2.71179$ $N_5 := 2.09213$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$\frac{B \cdot C \cdot N_u}{A \cdot D \cdot E} = 4.387937$ $Num := \frac{B \cdot C \cdot N_u}{\sqrt{(B \cdot C \cdot N_u)^2}}$ $Den := \frac{A \cdot D \cdot E}{\sqrt{(A \cdot D \cdot E)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot C \cdot N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{B^2 \cdot C^2 \cdot N_u{}^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 0: $\frac{B \cdot N_u}{\sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 0, 0: $\frac{C \cdot N_u}{\sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 0: $\frac{C \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 0, 0: $\frac{B \cdot C \cdot N_u}{\sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 0, 0: $\frac{B \cdot C \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

0, 0, 0, 4, 0: $\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2}}$

1, 0, 0, 4, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{N_u^2}}$

0, 2, 0, 4, 0: $\frac{B \cdot N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 4, 0: $\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 4, 0: $\frac{C \cdot N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 4, 0: $\frac{C \cdot N_u \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 4, 0: $\frac{B \cdot C \cdot N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 4, 0: $\frac{B \cdot C \cdot N_u \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

0, 0, 0, 0, 5: $\frac{N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u^2}}$

1, 0, 0, 0, 5: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 5: $\frac{B \cdot N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 5: $\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 0, 5: $\frac{C \cdot N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 5: $\frac{C \cdot N_u \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 0, 5: $\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 0, 5: $\frac{B \cdot C \cdot N_u \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

0, 0, 0, 4, 5: $\frac{N_u \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{N_u^2}}$

1, 0, 0, 4, 5: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{N_u^2}}$

0, 2, 0, 4, 5: $\frac{B \cdot N_u \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 4, 5: $\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{B^2 \cdot N_u^2}}$

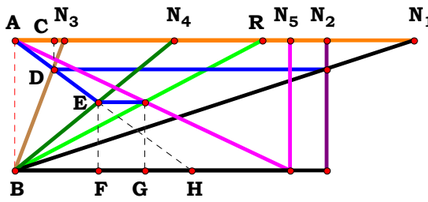
0, 0, 3, 4, 5: $\frac{C \cdot N_u \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 4, 5: $\frac{C \cdot N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 4, 5: $\frac{B \cdot C \cdot N_u \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 4, 5: $\frac{B \cdot C \cdot N_u \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1CST6R0



$N_1 = 3.05811$
$N_2 = 2.38980$
$N_3 = 0.37988$
$N_4 = 1.22018$
$N_5 = 2.11150$
$R = 1.89667$

Unit. $AB := 1$ **Given.** $N_1 := 3.05811$ $N_2 := 2.38980$ $N_3 := .37988$

$N_4 := 1.22018$ $N_5 := 2.11150$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{C \cdot N_u \cdot (B - A)}{A \cdot D \cdot E} = 1.89664$$

$$Num := \frac{C \cdot N_u \cdot (B - A)}{\sqrt{\left[C \cdot N_u \cdot (B - A)\right]^2}}$$

$$Den := \frac{A \cdot D \cdot E}{\sqrt{(A \cdot D \cdot E)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot N_u \cdot (B - A) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{C^2 \cdot N_u{}^2 \cdot (A - B)^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: 0

0, 0, 0, 4, 0: 0

0, 0, 0, 0, 5: 0

0, 0, 0, 4, 5: 0

1, 0, 0, 0, 0: $-\frac{N_u \cdot (A-1) \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2 \cdot (A-1)^2}}$

1, 0, 0, 4, 0: $-\frac{N_u \cdot (A-1) \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A-1)^2}}$

1, 0, 0, 0, 5: $-\frac{N_u \cdot (A-1) \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A-1)^2}}$

1, 0, 0, 4, 5: $-\frac{N_u \cdot (A-1) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{N_u^2 \cdot (A-1)^2}}$

0, 2, 0, 0, 0: $\frac{N_u \cdot (B-1)}{\sqrt{N_u^2 \cdot (B-1)^2}}$

0, 2, 0, 4, 0: $\frac{N_u \cdot (B-1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (B-1)^2}}$

0, 2, 0, 0, 5: $\frac{N_u \cdot (B-1) \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u^2 \cdot (B-1)^2}}$

0, 2, 0, 4, 5: $\frac{N_u \cdot (B-1) \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{N_u^2 \cdot (B-1)^2}}$

1, 2, 0, 0, 0: $-\frac{N_u \cdot \sqrt{A^2} \cdot (A-B)}{A \cdot \sqrt{N_u^2 \cdot (A-B)^2}}$

1, 2, 0, 4, 0: $-\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A-B)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A-B)^2}}$

1, 2, 0, 0, 5: $-\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A-B)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A-B)^2}}$

1, 2, 0, 4, 5: $-\frac{N_u \cdot (A-B) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{N_u^2 \cdot (A-B)^2}}$

0, 0, 3, 0, 0: 0

0, 0, 3, 4, 0: 0

0, 0, 3, 0, 5: 0

0, 0, 3, 4, 5: 0

1, 0, 3, 0, 0: $-\frac{C \cdot N_u \cdot (A-1) \cdot \sqrt{A^2}}{A \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A-1)^2}}$

1, 0, 3, 4, 0: $-\frac{C \cdot N_u \cdot (A-1) \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A-1)^2}}$

1, 0, 3, 0, 5: $-\frac{C \cdot N_u \cdot (A-1) \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A-1)^2}}$

1, 0, 3, 4, 5: $-\frac{C \cdot N_u \cdot (A-1) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A-1)^2}}$

0, 2, 3, 0, 0: $\frac{C \cdot N_u \cdot (B-1)}{\sqrt{C^2 \cdot N_u^2 \cdot (B-1)^2}}$

0, 2, 3, 4, 0: $\frac{C \cdot N_u \cdot (B-1) \cdot \sqrt{D^2}}{D \cdot \sqrt{C^2 \cdot N_u^2 \cdot (B-1)^2}}$

0, 2, 3, 0, 5: $\frac{C \cdot N_u \cdot (B-1) \cdot \sqrt{E^2}}{E \cdot \sqrt{C^2 \cdot N_u^2 \cdot (B-1)^2}}$

0, 2, 3, 4, 5: $\frac{C \cdot N_u \cdot (B-1) \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{C^2 \cdot N_u^2 \cdot (B-1)^2}}$

1, 2, 3, 0, 0: $-\frac{C \cdot N_u \cdot \sqrt{A^2} \cdot (A-B)}{A \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A-B)^2}}$

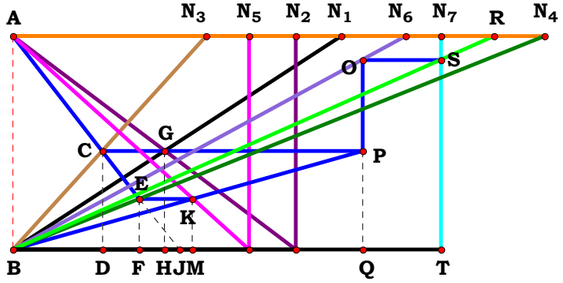
1, 2, 3, 4, 0: $-\frac{C \cdot N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A-B)}{A \cdot D \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A-B)^2}}$

1, 2, 3, 0, 5: $-\frac{C \cdot N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A-B)}{A \cdot E \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A-B)^2}}$

1, 2, 3, 4, 5: $\frac{C \cdot N_u \cdot (B-A) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A-B)^2}}$

1CST6R1

Descriptions.



$N_1 = 1.53745$
$N_2 = 1.32436$
$N_3 = 0.90291$
$N_4 = 2.48902$
$N_5 = 1.10418$
$N_6 = 1.84030$
$N_7 = 2.00118$
$R = 2.25213$

Unit. $AB := 1$ Given. $N_1 := 1.53745$ $N_2 := 1.32436$ $N_3 := .90291$ $N_4 := 2.48902$

$N_5 := 1.10418$ $N_6 := 1.84030$ $N_7 := 2.00118$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$$\frac{D \cdot E \cdot N_u \cdot (A+B)}{B \cdot C \cdot F \cdot G} = 2.252116$$

$$Num := \frac{D \cdot E \cdot N_u \cdot (A+B)}{\sqrt{\left[D \cdot E \cdot N_u \cdot (A+B)\right]^2}}$$

$$Den := \frac{B \cdot C \cdot F \cdot G}{\sqrt{(B \cdot C \cdot F \cdot G)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot E \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2 \cdot G^2}}{B \cdot C \cdot F \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u{}^2 \cdot (A+B)^2}} = 0$$

For 7 variables there are 128 subsets.

0, 0, 0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0, 0, 0: $\frac{N_u \cdot (A+1)}{\sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 0, 0, 0, 0, 0: $\frac{N_u \cdot (B+1) \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2 \cdot (B+1)^2}}$

1, 2, 0, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot (A+B)}{B \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$

0, 0, 3, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2}}$

1, 0, 3, 0, 0, 0, 0: $\frac{N_u \cdot (A+1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 3, 0, 0, 0, 0: $\frac{N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{N_u^2 \cdot (B+1)^2}}$

1, 2, 3, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2 \cdot C^2} \cdot (A+B)}{B \cdot C \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$

0, 0, 0, 4, 0, 0, 0: $\frac{D \cdot N_u}{\sqrt{D^2 \cdot N_u^2}}$

1, 0, 0, 4, 0, 0, 0: $\frac{D \cdot N_u \cdot (A+1)}{\sqrt{D^2 \cdot N_u^2 \cdot (A+1)^2}}$

0, 2, 0, 4, 0, 0, 0: $\frac{D \cdot N_u \cdot (B+1) \cdot \sqrt{B^2}}{B \cdot \sqrt{D^2 \cdot N_u^2 \cdot (B+1)^2}}$

1, 2, 0, 4, 0, 0, 0: $\frac{D \cdot N_u \cdot \sqrt{B^2} \cdot (A+B)}{B \cdot \sqrt{D^2 \cdot N_u^2 \cdot (A+B)^2}}$

0, 0, 3, 4, 0, 0, 0: $\frac{D \cdot N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{D^2 \cdot N_u^2}}$

1, 0, 3, 4, 0, 0, 0: $\frac{D \cdot N_u \cdot (A+1) \cdot \sqrt{C^2}}{C \cdot \sqrt{D^2 \cdot N_u^2 \cdot (A+1)^2}}$

0, 2, 3, 4, 0, 0, 0: $\frac{D \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{D^2 \cdot N_u^2 \cdot (B+1)^2}}$

1, 2, 3, 4, 0, 0, 0: $\frac{D \cdot N_u \cdot \sqrt{B^2 \cdot C^2} \cdot (A+B)}{B \cdot C \cdot \sqrt{D^2 \cdot N_u^2 \cdot (A+B)^2}}$

0, 0, 0, 0, 5, 0, 0: $$\frac{E \cdot N_u}{\sqrt{E^2 \cdot {N_u}^2}}$$

1, 0, 0, 0, 5, 0, 0: $$\frac{E \cdot N_u \cdot (A+1)}{\sqrt{E^2 \cdot {N_u}^2 \cdot (A+1)^2}}$$

0, 2, 0, 0, 5, 0, 0: $$\frac{E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2}}{B \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B+1)^2}}$$

1, 2, 0, 0, 5, 0, 0: $$\frac{E \cdot N_u \cdot \sqrt{B^2} \cdot (A+B)}{B \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A+B)^2}}$$

0, 0, 3, 0, 5, 0, 0: $$\frac{E \cdot N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{E^2 \cdot {N_u}^2}}$$

1, 0, 3, 0, 5, 0, 0: $$\frac{E \cdot N_u \cdot (A+1) \cdot \sqrt{C^2}}{C \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A+1)^2}}$$

0, 2, 3, 0, 5, 0, 0: $$\frac{E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B+1)^2}}$$

1, 2, 3, 0, 5, 0, 0: $$\frac{E \cdot N_u \cdot \sqrt{B^2 \cdot C^2} \cdot (A+B)}{B \cdot C \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A+B)^2}}$$

0, 0, 0, 4, 5, 0, 0: $$\frac{D \cdot E \cdot N_u}{\sqrt{D^2 \cdot E^2 \cdot {N_u}^2}}$$

1, 0, 0, 4, 5, 0, 0: $$\frac{D \cdot E \cdot N_u \cdot (A+1)}{\sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (A+1)^2}}$$

0, 2, 0, 4, 5, 0, 0: $$\frac{D \cdot E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2}}{B \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (B+1)^2}}$$

1, 2, 0, 4, 5, 0, 0: $$\frac{D \cdot E \cdot N_u \cdot \sqrt{B^2} \cdot (A+B)}{B \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (A+B)^2}}$$

0, 0, 3, 4, 5, 0, 0: $$\frac{D \cdot E \cdot N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2}}$$

1, 0, 3, 4, 5, 0, 0: $$\frac{D \cdot E \cdot N_u \cdot (A+1) \cdot \sqrt{C^2}}{C \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (A+1)^2}}$$

0, 2, 3, 4, 5, 0, 0: $$\frac{D \cdot E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (B+1)^2}}$$

1, 2, 3, 4, 5, 0, 0: $$\frac{D \cdot E \cdot N_u \cdot \sqrt{B^2 \cdot C^2} \cdot (A+B)}{B \cdot C \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (A+B)^2}}$$

0, 0, 0, 0, 0, 6, 0: $$\frac{N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u{}^2}}$$

1, 0, 0, 0, 0, 6, 0: $$\frac{N_u \cdot (A+1) \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 0, 0, 0, 6, 0: $$\frac{N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot F^2}}{B \cdot F \cdot \sqrt{N_u{}^2 \cdot (B+1)^2}}$$

1, 2, 0, 0, 0, 6, 0: $$\frac{N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (A+B)}{B \cdot F \cdot \sqrt{N_u{}^2 \cdot (A+B)^2}}$$

0, 0, 3, 0, 0, 6, 0: $$\frac{N_u \cdot \sqrt{C^2 \cdot F^2}}{C \cdot F \cdot \sqrt{N_u{}^2}}$$

1, 0, 3, 0, 0, 6, 0: $$\frac{N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot F^2}}{C \cdot F \cdot \sqrt{N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 3, 0, 0, 6, 0: $$\frac{N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2}}{B \cdot C \cdot F \cdot \sqrt{N_u{}^2 \cdot (B+1)^2}}$$

1, 2, 3, 0, 0, 6, 0: $$\frac{N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2}}{B \cdot C \cdot F \cdot \sqrt{N_u{}^2 \cdot (A+B)^2}}$$

0, 0, 0, 4, 0, 6, 0: $$\frac{D \cdot N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{D^2 \cdot N_u{}^2}}$$

1, 0, 0, 4, 0, 6, 0: $$\frac{D \cdot N_u \cdot (A+1) \cdot \sqrt{F^2}}{F \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 0, 4, 0, 6, 0: $$\frac{D \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot F^2}}{B \cdot F \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (B+1)^2}}$$

1, 2, 0, 4, 0, 6, 0: $$\frac{D \cdot N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (A+B)}{B \cdot F \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (A+B)^2}}$$

0, 0, 3, 4, 0, 6, 0: $$\frac{D \cdot N_u \cdot \sqrt{C^2 \cdot F^2}}{C \cdot F \cdot \sqrt{D^2 \cdot N_u{}^2}}$$

1, 0, 3, 4, 0, 6, 0: $$\frac{D \cdot N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot F^2}}{C \cdot F \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 3, 4, 0, 6, 0: $$\frac{D \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2}}{B \cdot C \cdot F \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (B+1)^2}}$$

1, 2, 3, 4, 0, 6, 0: $$\frac{D \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2}}{B \cdot C \cdot F \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (A+B)^2}}$$

0, 0, 0, 0, 5, 6, 0:

$$\frac{E \cdot N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{E^2 \cdot {N_u}^2}}$$

1, 0, 0, 0, 5, 6, 0:

$$\frac{E \cdot N_u \cdot (A+1) \cdot \sqrt{F^2}}{F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A+1)^2}}$$

0, 2, 0, 0, 5, 6, 0:

$$\frac{E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot F^2}}{B \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B+1)^2}}$$

1, 2, 0, 0, 5, 6, 0:

$$\frac{E \cdot N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (A+B)}{B \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A+B)^2}}$$

0, 0, 3, 0, 5, 6, 0:

$$\frac{E \cdot N_u \cdot \sqrt{C^2 \cdot F^2}}{C \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2}}$$

1, 0, 3, 0, 5, 6, 0:

$$\frac{E \cdot N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot F^2}}{C \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A+1)^2}}$$

0, 2, 3, 0, 5, 6, 0:

$$\frac{E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2}}{B \cdot C \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (B+1)^2}}$$

1, 2, 3, 0, 5, 6, 0:

$$\frac{E \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2}}{B \cdot C \cdot F \cdot \sqrt{E^2 \cdot {N_u}^2 \cdot (A+B)^2}}$$

0, 0, 0, 4, 5, 6, 0:

$$\frac{D \cdot E \cdot N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2}}$$

1, 0, 0, 4, 5, 6, 0:

$$\frac{D \cdot E \cdot N_u \cdot (A+1) \cdot \sqrt{F^2}}{F \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (A+1)^2}}$$

0, 2, 0, 4, 5, 6, 0:

$$\frac{D \cdot E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot F^2}}{B \cdot F \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (B+1)^2}}$$

1, 2, 0, 4, 5, 6, 0:

$$\frac{D \cdot E \cdot N_u \cdot \sqrt{B^2 \cdot F^2} \cdot (A+B)}{B \cdot F \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (A+B)^2}}$$

0, 0, 3, 4, 5, 6, 0:

$$\frac{D \cdot E \cdot N_u \cdot \sqrt{C^2 \cdot F^2}}{C \cdot F \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2}}$$

1, 0, 3, 4, 5, 6, 0:

$$\frac{D \cdot E \cdot N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot F^2}}{C \cdot F \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (A+1)^2}}$$

0, 2, 3, 4, 5, 6, 0:

$$\frac{D \cdot E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2}}{B \cdot C \cdot F \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (B+1)^2}}$$

1, 2, 3, 4, 5, 6, 0:

$$\frac{D \cdot E \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2}}{B \cdot C \cdot F \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (A+B)^2}}$$

0, 0, 0, 0, 0, 0, 7: $$\frac{N_u \cdot \sqrt{G^2}}{G \cdot \sqrt{N_u{}^2}}$$

1, 0, 0, 0, 0, 0, 7: $$\frac{N_u \cdot (A+1) \cdot \sqrt{G^2}}{G \cdot \sqrt{N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 0, 0, 0, 0, 7: $$\frac{N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot G^2}}{B \cdot G \cdot \sqrt{N_u{}^2 \cdot (B+1)^2}}$$

1, 2, 0, 0, 0, 0, 7: $$\frac{N_u \cdot \sqrt{B^2 \cdot G^2} \cdot (A+B)}{B \cdot G \cdot \sqrt{N_u{}^2 \cdot (A+B)^2}}$$

0, 0, 3, 0, 0, 0, 7: $$\frac{N_u \cdot \sqrt{C^2 \cdot G^2}}{C \cdot G \cdot \sqrt{N_u{}^2}}$$

1, 0, 3, 0, 0, 0, 7: $$\frac{N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot G^2}}{C \cdot G \cdot \sqrt{N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 3, 0, 0, 0, 7: $$\frac{N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2 \cdot G^2}}{B \cdot C \cdot G \cdot \sqrt{N_u{}^2 \cdot (B+1)^2}}$$

1, 2, 3, 0, 0, 0, 7: $$\frac{N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot G^2}}{B \cdot C \cdot G \cdot \sqrt{N_u{}^2 \cdot (A+B)^2}}$$

0, 0, 0, 4, 0, 0, 7: $$\frac{D \cdot N_u \cdot \sqrt{G^2}}{G \cdot \sqrt{D^2 \cdot N_u{}^2}}$$

1, 0, 0, 4, 0, 0, 7: $$\frac{D \cdot N_u \cdot (A+1) \cdot \sqrt{G^2}}{G \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 0, 4, 0, 0, 7: $$\frac{D \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot G^2}}{B \cdot G \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (B+1)^2}}$$

1, 2, 0, 4, 0, 0, 7: $$\frac{D \cdot N_u \cdot \sqrt{B^2 \cdot G^2} \cdot (A+B)}{B \cdot G \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (A+B)^2}}$$

0, 0, 3, 4, 0, 0, 7: $$\frac{D \cdot N_u \cdot \sqrt{C^2 \cdot G^2}}{C \cdot G \cdot \sqrt{D^2 \cdot N_u{}^2}}$$

1, 0, 3, 4, 0, 0, 7: $$\frac{D \cdot N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot G^2}}{C \cdot G \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 3, 4, 0, 0, 7: $$\frac{D \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2 \cdot G^2}}{B \cdot C \cdot G \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (B+1)^2}}$$

1, 2, 3, 4, 0, 0, 7: $$\frac{D \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot G^2}}{B \cdot C \cdot G \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (A+B)^2}}$$

0, 0, 0, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{G^2}}{G \cdot \sqrt{E^2 \cdot N_u^2}}$$

1, 0, 0, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot (A+1) \cdot \sqrt{G^2}}{G \cdot \sqrt{E^2 \cdot N_u^2 \cdot (A+1)^2}}$$

0, 2, 0, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot G^2}}{B \cdot G \cdot \sqrt{E^2 \cdot N_u^2 \cdot (B+1)^2}}$$

1, 2, 0, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{B^2 \cdot G^2} \cdot (A+B)}{B \cdot G \cdot \sqrt{E^2 \cdot N_u^2 \cdot (A+B)^2}}$$

0, 0, 3, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot \sqrt{C^2 \cdot G^2}}{C \cdot G \cdot \sqrt{E^2 \cdot N_u^2}}$$

1, 0, 3, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot G^2}}{C \cdot G \cdot \sqrt{E^2 \cdot N_u^2 \cdot (A+1)^2}}$$

0, 2, 3, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2 \cdot G^2}}{B \cdot C \cdot G \cdot \sqrt{E^2 \cdot N_u^2 \cdot (B+1)^2}}$$

1, 2, 3, 0, 5, 0, 7: $$\frac{E \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot G^2}}{B \cdot C \cdot G \cdot \sqrt{E^2 \cdot N_u^2 \cdot (A+B)^2}}$$

0, 0, 0, 4, 5, 0, 7: $$\frac{D \cdot E \cdot N_u \cdot \sqrt{G^2}}{G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u^2}}$$

1, 0, 0, 4, 5, 0, 7: $$\frac{D \cdot E \cdot N_u \cdot (A+1) \cdot \sqrt{G^2}}{G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u^2 \cdot (A+1)^2}}$$

0, 2, 0, 4, 5, 0, 7: $$\frac{D \cdot E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot G^2}}{B \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u^2 \cdot (B+1)^2}}$$

1, 2, 0, 4, 5, 0, 7: $$\frac{D \cdot E \cdot N_u \cdot \sqrt{B^2 \cdot G^2} \cdot (A+B)}{B \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u^2 \cdot (A+B)^2}}$$

0, 0, 3, 4, 5, 0, 7: $$\frac{D \cdot E \cdot N_u \cdot \sqrt{C^2 \cdot G^2}}{C \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u^2}}$$

1, 0, 3, 4, 5, 0, 7: $$\frac{D \cdot E \cdot N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot G^2}}{C \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u^2 \cdot (A+1)^2}}$$

0, 2, 3, 4, 5, 0, 7: $$\frac{D \cdot E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2 \cdot G^2}}{B \cdot C \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u^2 \cdot (B+1)^2}}$$

1, 2, 3, 4, 5, 0, 7: $$\frac{D \cdot E \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot G^2}}{B \cdot C \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u^2 \cdot (A+B)^2}}$$

0, 0, 0, 0, 0, 6, 7: $$\frac{N_u \cdot \sqrt{F^2 \cdot G^2}}{F \cdot G \cdot \sqrt{N_u^2}}$$

1, 0, 0, 0, 0, 6, 7: $$\frac{N_u \cdot (A+1) \cdot \sqrt{F^2 \cdot G^2}}{F \cdot G \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$$

0, 2, 0, 0, 0, 6, 7: $$\frac{N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot F^2 \cdot G^2}}{B \cdot F \cdot G \cdot \sqrt{N_u^2 \cdot (B+1)^2}}$$

1, 2, 0, 0, 0, 6, 7: $$\frac{N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot F^2 \cdot G^2}}{B \cdot F \cdot G \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$$

0, 0, 3, 0, 0, 6, 7: $$\frac{N_u \cdot \sqrt{C^2 \cdot F^2 \cdot G^2}}{C \cdot F \cdot G \cdot \sqrt{N_u^2}}$$

1, 0, 3, 0, 0, 6, 7: $$\frac{N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot F^2 \cdot G^2}}{C \cdot F \cdot G \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$$

0, 2, 3, 0, 0, 6, 7: $$\frac{N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2 \cdot G^2}}{B \cdot C \cdot F \cdot G \cdot \sqrt{N_u^2 \cdot (B+1)^2}}$$

1, 2, 3, 0, 0, 6, 7: $$\frac{N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2 \cdot G^2}}{B \cdot C \cdot F \cdot G \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$$

0, 0, 0, 4, 0, 6, 7: $$\frac{D \cdot N_u \cdot \sqrt{F^2 \cdot G^2}}{F \cdot G \cdot \sqrt{D^2 \cdot N_u^2}}$$

1, 0, 0, 4, 0, 6, 7: $$\frac{D \cdot N_u \cdot (A+1) \cdot \sqrt{F^2 \cdot G^2}}{F \cdot G \cdot \sqrt{D^2 \cdot N_u^2 \cdot (A+1)^2}}$$

0, 2, 0, 4, 0, 6, 7: $$\frac{D \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot F^2 \cdot G^2}}{B \cdot F \cdot G \cdot \sqrt{D^2 \cdot N_u^2 \cdot (B+1)^2}}$$

1, 2, 0, 4, 0, 6, 7: $$\frac{D \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot F^2 \cdot G^2}}{B \cdot F \cdot G \cdot \sqrt{D^2 \cdot N_u^2 \cdot (A+B)^2}}$$

0, 0, 3, 4, 0, 6, 7: $$\frac{D \cdot N_u \cdot \sqrt{C^2 \cdot F^2 \cdot G^2}}{C \cdot F \cdot G \cdot \sqrt{D^2 \cdot N_u^2}}$$

1, 0, 3, 4, 0, 6, 7: $$\frac{D \cdot N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot F^2 \cdot G^2}}{C \cdot F \cdot G \cdot \sqrt{D^2 \cdot N_u^2 \cdot (A+1)^2}}$$

0, 2, 3, 4, 0, 6, 7: $$\frac{D \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2 \cdot G^2}}{B \cdot C \cdot F \cdot G \cdot \sqrt{D^2 \cdot N_u^2 \cdot (B+1)^2}}$$

1, 2, 3, 4, 0, 6, 7: $$\frac{D \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2 \cdot G^2}}{B \cdot C \cdot F \cdot G \cdot \sqrt{D^2 \cdot N_u^2 \cdot (A+B)^2}}$$

0, 0, 0, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot \sqrt{F^2 \cdot G^2}}{F \cdot G \cdot \sqrt{E^2 \cdot N_u{}^2}}$$

1, 0, 0, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot (A+1) \cdot \sqrt{F^2 \cdot G^2}}{F \cdot G \cdot \sqrt{E^2 \cdot N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 0, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot F^2 \cdot G^2}}{B \cdot F \cdot G \cdot \sqrt{E^2 \cdot N_u{}^2 \cdot (B+1)^2}}$$

1, 2, 0, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot F^2 \cdot G^2}}{B \cdot F \cdot G \cdot \sqrt{E^2 \cdot N_u{}^2 \cdot (A+B)^2}}$$

0, 0, 3, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot \sqrt{C^2 \cdot F^2 \cdot G^2}}{C \cdot F \cdot G \cdot \sqrt{E^2 \cdot N_u{}^2}}$$

1, 0, 3, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot F^2 \cdot G^2}}{C \cdot F \cdot G \cdot \sqrt{E^2 \cdot N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 3, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2 \cdot G^2}}{B \cdot C \cdot F \cdot G \cdot \sqrt{E^2 \cdot N_u{}^2 \cdot (B+1)^2}}$$

1, 2, 3, 0, 5, 6, 7: $$\frac{E \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2 \cdot G^2}}{B \cdot C \cdot F \cdot G \cdot \sqrt{E^2 \cdot N_u{}^2 \cdot (A+B)^2}}$$

0, 0, 0, 4, 5, 6, 7: $$\frac{D \cdot E \cdot N_u \cdot \sqrt{F^2 \cdot G^2}}{F \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u{}^2}}$$

1, 0, 0, 4, 5, 6, 7: $$\frac{D \cdot E \cdot N_u \cdot (A+1) \cdot \sqrt{F^2 \cdot G^2}}{F \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 0, 4, 5, 6, 7: $$\frac{D \cdot E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot F^2 \cdot G^2}}{B \cdot F \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u{}^2 \cdot (B+1)^2}}$$

1, 2, 0, 4, 5, 6, 7: $$\frac{D \cdot E \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot F^2 \cdot G^2}}{B \cdot F \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u{}^2 \cdot (A+B)^2}}$$

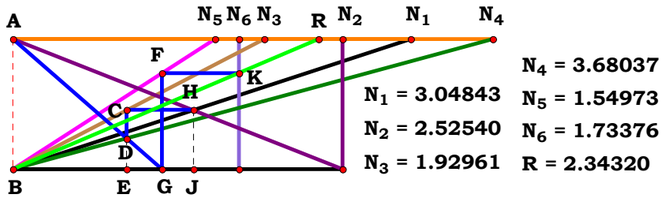
0, 0, 3, 4, 5, 6, 7: $$\frac{D \cdot E \cdot N_u \cdot \sqrt{C^2 \cdot F^2 \cdot G^2}}{C \cdot F \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u{}^2}}$$

1, 0, 3, 4, 5, 6, 7: $$\frac{D \cdot E \cdot N_u \cdot (A+1) \cdot \sqrt{C^2 \cdot F^2 \cdot G^2}}{C \cdot F \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 3, 4, 5, 6, 7: $$\frac{D \cdot E \cdot N_u \cdot (B+1) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2 \cdot G^2}}{B \cdot C \cdot F \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u{}^2 \cdot (B+1)^2}}$$

1, 2, 3, 4, 5, 6, 7: $$\frac{D \cdot E \cdot N_u \cdot (A+B) \cdot \sqrt{B^2 \cdot C^2 \cdot F^2 \cdot G^2}}{B \cdot C \cdot F \cdot G \cdot \sqrt{D^2 \cdot E^2 \cdot N_u{}^2 \cdot (A+B)^2}}$$

1CST6R2



Unit. $AB := 1$ Given. $N_1 := 3.04843$ $N_2 := 2.52540$ $N_3 := 1.92961$

$N_4 := 3.68037$ $N_5 := 1.54973$ $N_6 := 1.73376$

$N_u := -3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u \cdot (A \cdot C - A \cdot D + B \cdot C)}{A \cdot E \cdot F} = 2.343206$$

$$Num := \frac{N_u \cdot (A \cdot C - A \cdot D + B \cdot C)}{\sqrt{\left[N_u \cdot (A \cdot C - A \cdot D + B \cdot C)\right]^2}}$$

$$Den := \frac{A \cdot E \cdot F}{\sqrt{(A \cdot E \cdot F)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (A \cdot C - A \cdot D + B \cdot C)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A \cdot C - A \cdot D + B \cdot C)^2}} = 0$$

For 6 variables there are 64 subsets.

0, 0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 0, 0: $\frac{B \cdot N_u}{\sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{A^2}}{A \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 0, 0, 0: $\frac{N_u \cdot (2 \cdot C - 1)}{\sqrt{N_u^2 \cdot (2 \cdot C - 1)^2}}$

1, 0, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (C - A + A \cdot C)}{A \cdot \sqrt{N_u^2 \cdot (C - A + A \cdot C)^2}}$

0, 2, 3, 0, 0, 0: $\frac{N_u \cdot (C + B \cdot C - 1)}{\sqrt{N_u^2 \cdot (C + B \cdot C - 1)^2}}$

1, 2, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (A \cdot C - A + B \cdot C)}{A \cdot \sqrt{N_u^2 \cdot (A \cdot C - A + B \cdot C)^2}}$

0, 0, 0, 4, 0, 0: $-\frac{N_u \cdot (D - 2)}{\sqrt{N_u^2 \cdot (D - 2)^2}}$

1, 0, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (A - A \cdot D + 1)}{A \cdot \sqrt{N_u^2 \cdot (A - A \cdot D + 1)^2}}$

0, 2, 0, 4, 0, 0: $\frac{N_u \cdot (B - D + 1)}{\sqrt{N_u^2 \cdot (B - D + 1)^2}}$

1, 2, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (A + B - A \cdot D)}{A \cdot \sqrt{N_u^2 \cdot (A + B - A \cdot D)^2}}$

0, 0, 3, 4, 0, 0: $-\frac{N_u \cdot (D - 2 \cdot C)}{\sqrt{N_u^2 \cdot (D - 2 \cdot C)^2}}$

1, 0, 3, 4, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (C + A \cdot C - A \cdot D)}{A \cdot \sqrt{N_u^2 \cdot (C + A \cdot C - A \cdot D)^2}}$

0, 2, 3, 4, 0, 0: $\frac{N_u \cdot (C - D + B \cdot C)}{\sqrt{N_u^2 \cdot (C - D + B \cdot C)^2}}$

1, 2, 3, 4, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (A \cdot C - A \cdot D + B \cdot C)}{A \cdot \sqrt{N_u^2 \cdot (A \cdot C - A \cdot D + B \cdot C)^2}}$

0, 0, 0, 0, 5, 0: $\frac{N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u^2}}$

1, 0, 0, 0, 5, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 5, 0: $\frac{B \cdot N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 5, 0: $\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 0, 5, 0: $\frac{N_u \cdot \sqrt{E^2} \cdot (2 \cdot C - 1)}{E \cdot \sqrt{N_u^2 \cdot (2 \cdot C - 1)^2}}$

1, 0, 3, 0, 5, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (C - A + A \cdot C)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (C - A + A \cdot C)^2}}$

0, 2, 3, 0, 5, 0: $\frac{N_u \cdot \sqrt{E^2} \cdot (C + B \cdot C - 1)}{E \cdot \sqrt{N_u^2 \cdot (C + B \cdot C - 1)^2}}$

1, 2, 3, 0, 5, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A \cdot C - A + B \cdot C)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A \cdot C - A + B \cdot C)^2}}$

0, 0, 0, 4, 5, 0: $-\frac{N_u \cdot (D - 2) \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u^2 \cdot (D - 2)^2}}$

1, 0, 0, 4, 5, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A - A \cdot D + 1)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A - A \cdot D + 1)^2}}$

0, 2, 0, 4, 5, 0: $\frac{N_u \cdot \sqrt{E^2} \cdot (B - D + 1)}{E \cdot \sqrt{N_u^2 \cdot (B - D + 1)^2}}$

1, 2, 0, 4, 5, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A + B - A \cdot D)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A + B - A \cdot D)^2}}$

0, 0, 3, 4, 5, 0: $-\frac{N_u \cdot \sqrt{E^2} \cdot (D - 2 \cdot C)}{E \cdot \sqrt{N_u^2 \cdot (D - 2 \cdot C)^2}}$

1, 0, 3, 4, 5, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (C + A \cdot C - A \cdot D)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (C + A \cdot C - A \cdot D)^2}}$

0, 2, 3, 4, 5, 0: $\frac{N_u \cdot \sqrt{E^2} \cdot (C - D + B \cdot C)}{E \cdot \sqrt{N_u^2 \cdot (C - D + B \cdot C)^2}}$

1, 2, 3, 4, 5, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A \cdot C - A \cdot D + B \cdot C)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A \cdot C - A \cdot D + B \cdot C)^2}}$

0, 0, 0, 0, 0, 6: $\frac{N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u^2}}$

1, 0, 0, 0, 0, 6: $\frac{N_u \cdot \sqrt{A^2 \cdot F^2}}{A \cdot F \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 0, 6: $\frac{B \cdot N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 0, 6: $\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot F^2}}{A \cdot F \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 0, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (2 \cdot C - 1)}{F \cdot \sqrt{N_u^2 \cdot (2 \cdot C - 1)^2}}$

1, 0, 3, 0, 0, 6: $\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (C - A + A \cdot C)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (C - A + A \cdot C)^2}}$

0, 2, 3, 0, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (C + B \cdot C - 1)}{F \cdot \sqrt{N_u^2 \cdot (C + B \cdot C - 1)^2}}$

1, 2, 3, 0, 0, 6: $\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (A \cdot C - A + B \cdot C)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (A \cdot C - A + B \cdot C)^2}}$

0, 0, 0, 4, 0, 6: $-\frac{N_u \cdot (D - 2) \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u^2 \cdot (D - 2)^2}}$

1, 0, 0, 4, 0, 6: $\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (A - A \cdot D + 1)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (A - A \cdot D + 1)^2}}$

0, 2, 0, 4, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (B - D + 1)}{F \cdot \sqrt{N_u^2 \cdot (B - D + 1)^2}}$

1, 2, 0, 4, 0, 6: $\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (A + B - A \cdot D)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (A + B - A \cdot D)^2}}$

0, 0, 3, 4, 0, 6: $-\frac{N_u \cdot \sqrt{F^2} \cdot (D - 2 \cdot C)}{F \cdot \sqrt{N_u^2 \cdot (D - 2 \cdot C)^2}}$

1, 0, 3, 4, 0, 6: $\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (C + A \cdot C - A \cdot D)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (C + A \cdot C - A \cdot D)^2}}$

0, 2, 3, 4, 0, 6: $\frac{N_u \cdot \sqrt{F^2} \cdot (C - D + B \cdot C)}{F \cdot \sqrt{N_u^2 \cdot (C - D + B \cdot C)^2}}$

1, 2, 3, 4, 0, 6: $\frac{N_u \cdot \sqrt{A^2 \cdot F^2} \cdot (A \cdot C - A \cdot D + B \cdot C)}{A \cdot F \cdot \sqrt{N_u^2 \cdot (A \cdot C - A \cdot D + B \cdot C)^2}}$

0, 0, 0, 0, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2}}{E \cdot F \cdot \sqrt{N_u{}^2}}$$

1, 0, 0, 0, 5, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2}}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2}}$$

0, 2, 0, 0, 5, 6: $$\frac{B \cdot N_u \cdot \sqrt{E^2 \cdot F^2}}{E \cdot F \cdot \sqrt{B^2 \cdot N_u{}^2}}$$

1, 2, 0, 0, 5, 6: $$\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2}}{A \cdot E \cdot F \cdot \sqrt{B^2 \cdot N_u{}^2}}$$

0, 0, 3, 0, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (2 \cdot C - 1)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (2 \cdot C - 1)^2}}$$

1, 0, 3, 0, 5, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (C - A + A \cdot C)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (C - A + A \cdot C)^2}}$$

0, 2, 3, 0, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (C + B \cdot C - 1)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (C + B \cdot C - 1)^2}}$$

1, 2, 3, 0, 5, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (A \cdot C - A + B \cdot C)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A \cdot C - A + B \cdot C)^2}}$$

0, 0, 0, 4, 5, 6: $$-\frac{N_u \cdot (D - 2) \cdot \sqrt{E^2 \cdot F^2}}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (D - 2)^2}}$$

1, 0, 0, 4, 5, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (A - A \cdot D + 1)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A - A \cdot D + 1)^2}}$$

0, 2, 0, 4, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (B - D + 1)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (B - D + 1)^2}}$$

1, 2, 0, 4, 5, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (A + B - A \cdot D)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A + B - A \cdot D)^2}}$$

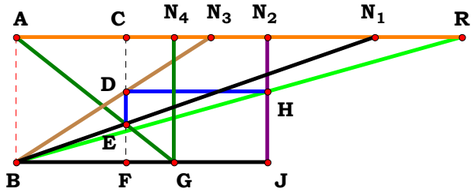
0, 0, 3, 4, 5, 6: $$-\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (D - 2 \cdot C)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (D - 2 \cdot C)^2}}$$

1, 0, 3, 4, 5, 6: $$\frac{N_u \cdot (C + A \cdot C - A \cdot D) \cdot \sqrt{A^2 \cdot E^2 \cdot F^2}}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (C + A \cdot C - A \cdot D)^2}}$$

0, 2, 3, 4, 5, 6: $$\frac{N_u \cdot \sqrt{E^2 \cdot F^2} \cdot (C - D + B \cdot C)}{E \cdot F \cdot \sqrt{N_u{}^2 \cdot (C - D + B \cdot C)^2}}$$

1, 2, 3, 4, 5, 6: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot F^2} \cdot (A \cdot C - A \cdot D + B \cdot C)}{A \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot (A \cdot C - A \cdot D + B \cdot C)^2}}$$

1CST6R3



$N_1 = 2.86869$
$N_2 = 2.01010$
$N_3 = 1.55556$
$N_4 = 1.26263$
$R = 3.56643$

Unit. $AB := 1$ Given. $N_1 := 2.86869$ $N_2 := 2.01010$ $N_3 := 1.55556$ $N_4 := 1.26263$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A + D)}{B \cdot C} = 3.566429$$

$$Num := \frac{N_u \cdot (A + D)}{\sqrt{\left[N_u \cdot (A + D)\right]^2}}$$

$$Den := \frac{B \cdot C}{\sqrt{(B \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot C^2} \cdot (A + D)}{B \cdot C \cdot \sqrt{{N_u}^2 \cdot (A + D)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0: $\frac{N_u \cdot (A+1)}{\sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 0, 0: $\frac{N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2}}$

1, 2, 0, 0: $\frac{N_u \cdot (A+1) \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 0, 3, 0: $\frac{N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2}}$

1, 0, 3, 0: $\frac{N_u \cdot (A+1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 3, 0: $\frac{N_u \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{N_u^2}}$

1, 2, 3, 0: $\frac{N_u \cdot (A+1) \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 0, 0, 4: $\frac{N_u \cdot (D+1)}{\sqrt{N_u^2 \cdot (D+1)^2}}$

1, 0, 0, 4: $\frac{N_u \cdot (A+D)}{\sqrt{N_u^2 \cdot (A+D)^2}}$

0, 2, 0, 4: $\frac{N_u \cdot (D+1) \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2 \cdot (D+1)^2}}$

1, 2, 0, 4: $\frac{N_u \cdot \sqrt{B^2} \cdot (A+D)}{B \cdot \sqrt{N_u^2 \cdot (A+D)^2}}$

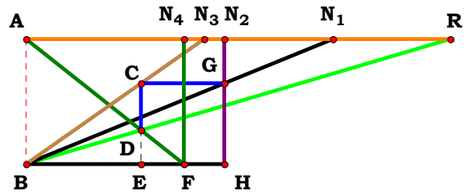
0, 0, 3, 4: $\frac{N_u \cdot (D+1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (D+1)^2}}$

1, 0, 3, 4: $\frac{N_u \cdot \sqrt{C^2} \cdot (A+D)}{C \cdot \sqrt{N_u^2 \cdot (A+D)^2}}$

0, 2, 3, 4: $\frac{N_u \cdot (D+1) \cdot \sqrt{B^2 \cdot C^2}}{B \cdot C \cdot \sqrt{N_u^2 \cdot (D+1)^2}}$

1, 2, 3, 4: $\frac{N_u \cdot \sqrt{B^2 \cdot C^2} \cdot (A+D)}{B \cdot C \cdot \sqrt{N_u^2 \cdot (A+D)^2}}$

1CST6R4



$N_1 = 2.45455$
$N_2 = 1.58586$
$N_3 = 1.42424$
$N_4 = 1.26263$
$R = 3.39291$

Unit. $AB := 1$ **Given.** $N_1 := 2.45455$ $N_2 := 1.58586$ $N_3 := 1.42424$ $N_4 := 1.26263$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$\frac{A \cdot N_u}{B \cdot C - A \cdot D} = 3.392845$

$Num := \frac{A \cdot N_u}{\sqrt{(A \cdot N_u)^2}}$

$Den := \frac{B \cdot C - A \cdot D}{\sqrt{(B \cdot C - A \cdot D)^2}}$

$L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{A \cdot N_u \cdot \sqrt{(A \cdot D - B \cdot C)^2}}{\sqrt{A^2 \cdot N_u{}^2} \cdot (B \cdot C - A \cdot D)} = 0$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0: $-\frac{A \cdot N_u \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{A^2 \cdot N_u^2}}$

0, 2, 0, 0: $\frac{N_u \cdot \sqrt{(B-1)^2}}{(B-1) \cdot \sqrt{N_u^2}}$

1, 2, 0, 0: $-\frac{A \cdot N_u \cdot \sqrt{(A-B)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (A-B)}$

0, 0, 3, 0: $\frac{N_u \cdot \sqrt{(C-1)^2}}{(C-1) \cdot \sqrt{N_u^2}}$

1, 0, 3, 0: $-\frac{A \cdot N_u \cdot \sqrt{(A-C)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (A-C)}$

0, 2, 3, 0: $\frac{N_u \cdot \sqrt{(B \cdot C-1)^2}}{\sqrt{N_u^2} \cdot (B \cdot C-1)}$

1, 2, 3, 0: $-\frac{A \cdot N_u \cdot \sqrt{(A-B \cdot C)^2}}{(A-B \cdot C) \cdot \sqrt{A^2 \cdot N_u^2}}$

0, 0, 0, 4: $-\frac{N_u \cdot \sqrt{(D-1)^2}}{(D-1) \cdot \sqrt{N_u^2}}$

1, 0, 0, 4: $-\frac{A \cdot N_u \cdot \sqrt{(A \cdot D-1)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (A \cdot D-1)}$

0, 2, 0, 4: $\frac{N_u \cdot \sqrt{(B-D)^2}}{\sqrt{N_u^2} \cdot (B-D)}$

1, 2, 0, 4: $\frac{A \cdot N_u \cdot \sqrt{(B-A \cdot D)^2}}{(B-A \cdot D) \cdot \sqrt{A^2 \cdot N_u^2}}$

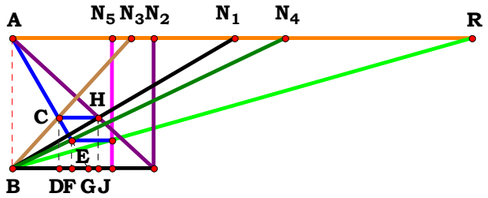
0, 0, 3, 4: $\frac{N_u \cdot \sqrt{(C-D)^2}}{\sqrt{N_u^2} \cdot (C-D)}$

1, 0, 3, 4: $\frac{A \cdot N_u \cdot \sqrt{(C-A \cdot D)^2}}{(C-A \cdot D) \cdot \sqrt{A^2 \cdot N_u^2}}$

0, 2, 3, 4: $-\frac{N_u \cdot \sqrt{(D-B \cdot C)^2}}{(D-B \cdot C) \cdot \sqrt{N_u^2}}$

1, 2, 3, 4: $\frac{A \cdot N_u \cdot \sqrt{(A \cdot D-B \cdot C)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (B \cdot C-A \cdot D)}$

1CST6R5



$N_1 = 1.70210$
$N_2 = 1.08221$
$N_3 = 0.91260$
$N_4 = 2.09190$
$N_5 = 0.76518$
$R = 3.52382$

Unit. $AB := 1$ Given. $N_1 := 1.70210$ $N_2 := 1.08221$ $N_3 := .91260$

$N_4 := 2.09190$ $N_5 := .76518$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot (A \cdot D + B \cdot C)}{A \cdot D \cdot E} = 3.523836$$

$$Num := \frac{N_u \cdot (A \cdot D + B \cdot C)}{\sqrt{\left[N_u \cdot (A \cdot D + B \cdot C)\right]^2}}$$

$$Den := \frac{A \cdot D \cdot E}{\sqrt{(A \cdot D \cdot E)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot (A \cdot D + B \cdot C) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{N_u{}^2 \cdot (A \cdot D + B \cdot C)^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: $$\frac{N_u}{\sqrt{N_u^2}}$$

1, 0, 0, 0, 0: $$\frac{N_u \cdot (A+1) \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$$

0, 2, 0, 0, 0: $$\frac{N_u \cdot (B+1)}{\sqrt{N_u^2 \cdot (B+1)^2}}$$

1, 2, 0, 0, 0: $$\frac{N_u \cdot \sqrt{A^2} \cdot (A+B)}{A \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$$

0, 0, 3, 0, 0: $$\frac{N_u \cdot (C+1)}{\sqrt{N_u^2 \cdot (C+1)^2}}$$

1, 0, 3, 0, 0: $$\frac{N_u \cdot \sqrt{A^2} \cdot (A+C)}{A \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$$

0, 2, 3, 0, 0: $$\frac{N_u \cdot (B \cdot C+1)}{\sqrt{N_u^2 \cdot (B \cdot C+1)^2}}$$

1, 2, 3, 0, 0: $$\frac{N_u \cdot (A+B \cdot C) \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2 \cdot (A+B \cdot C)^2}}$$

0, 0, 0, 4, 0: $$\frac{N_u \cdot (D+1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (D+1)^2}}$$

1, 0, 0, 4, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A \cdot D+1)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A \cdot D+1)^2}}$$

0, 2, 0, 4, 0: $$\frac{N_u \cdot \sqrt{D^2} \cdot (B+D)}{D \cdot \sqrt{N_u^2 \cdot (B+D)^2}}$$

1, 2, 0, 4, 0: $$\frac{N_u \cdot (B+A \cdot D) \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{N_u^2 \cdot (B+A \cdot D)^2}}$$

0, 0, 3, 4, 0: $$\frac{N_u \cdot \sqrt{D^2} \cdot (C+D)}{D \cdot \sqrt{N_u^2 \cdot (C+D)^2}}$$

1, 0, 3, 4, 0: $$\frac{N_u \cdot (C+A \cdot D) \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{N_u^2 \cdot (C+A \cdot D)^2}}$$

0, 2, 3, 4, 0: $$\frac{N_u \cdot (D+B \cdot C) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (D+B \cdot C)^2}}$$

1, 2, 3, 4, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A \cdot D+B \cdot C)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A \cdot D+B \cdot C)^2}}$$

0, 0, 0, 0, 5: $\frac{N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u^2}}$

1, 0, 0, 0, 5: $\frac{N_u \cdot (A+1) \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 0, 0, 5: $\frac{N_u \cdot (B+1) \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u^2 \cdot (B+1)^2}}$

1, 2, 0, 0, 5: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A+B)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$

0, 0, 3, 0, 5: $\frac{N_u \cdot (C+1) \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u^2 \cdot (C+1)^2}}$

1, 0, 3, 0, 5: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A+C)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A+C)^2}}$

0, 2, 3, 0, 5: $\frac{N_u \cdot \sqrt{E^2} \cdot (B \cdot C+1)}{E \cdot \sqrt{N_u^2 \cdot (B \cdot C+1)^2}}$

1, 2, 3, 0, 5: $\frac{N_u \cdot (A+B \cdot C) \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A+B \cdot C)^2}}$

0, 0, 0, 4, 5: $\frac{N_u \cdot (D+1) \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{N_u^2 \cdot (D+1)^2}}$

1, 0, 0, 4, 5: $\frac{N_u \cdot (A \cdot D+1) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{N_u^2 \cdot (A \cdot D+1)^2}}$

0, 2, 0, 4, 5: $\frac{N_u \cdot \sqrt{D^2 \cdot E^2} \cdot (B+D)}{D \cdot E \cdot \sqrt{N_u^2 \cdot (B+D)^2}}$

1, 2, 0, 4, 5: $\frac{N_u \cdot (B+A \cdot D) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{N_u^2 \cdot (B+A \cdot D)^2}}$

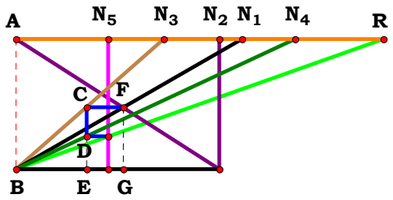
0, 0, 3, 4, 5: $\frac{N_u \cdot \sqrt{D^2 \cdot E^2} \cdot (C+D)}{D \cdot E \cdot \sqrt{N_u^2 \cdot (C+D)^2}}$

1, 0, 3, 4, 5: $\frac{N_u \cdot (C+A \cdot D) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{N_u^2 \cdot (C+A \cdot D)^2}}$

0, 2, 3, 4, 5: $\frac{N_u \cdot (D+B \cdot C) \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{N_u^2 \cdot (D+B \cdot C)^2}}$

1, 2, 3, 4, 5: $\frac{N_u \cdot (A \cdot D+B \cdot C) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{N_u^2 \cdot (A \cdot D+B \cdot C)^2}}$

1CST6R6



$N_1 = 1.73116$
$N_2 = 1.55682$
$N_3 = 1.13537$
$N_4 = 2.14033$
$N_5 = 0.70706$
$R = 2.81508$

Unit. $AB := 1$ Given. $N_1 := 1.73116$ $N_2 := 1.55682$ $N_3 := 1.13537$

$N_4 := 2.14033$ $N_5 := .70706$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{C \cdot N_u \cdot (A + B)}{A \cdot D \cdot E} = 2.815078$$

$$Num := \frac{C \cdot N_u \cdot (A + B)}{\sqrt{\left[C \cdot N_u \cdot (A + B)\right]^2}}$$

$$Den := \frac{A \cdot D \cdot E}{\sqrt{(A \cdot D \cdot E)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot N_u \cdot (A + B) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{C^2 \cdot N_u{}^2 \cdot (A + B)^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

0, 0, 0, 4, 0: $\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2}}$

0, 0, 0, 0, 5: $\frac{N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u^2}}$

0, 0, 0, 4, 5: $\frac{N_u \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{N_u^2}}$

1, 0, 0, 0, 0: $\frac{N_u \cdot (A+1) \cdot \sqrt{A^2}}{A \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

1, 0, 0, 4, 0: $\frac{N_u \cdot (A+1) \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

1, 0, 0, 0, 5: $\frac{N_u \cdot (A+1) \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

1, 0, 0, 4, 5: $\frac{N_u \cdot (A+1) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{N_u^2 \cdot (A+1)^2}}$

0, 2, 0, 0, 0: $\frac{N_u \cdot (B+1)}{\sqrt{N_u^2 \cdot (B+1)^2}}$

0, 2, 0, 4, 0: $\frac{N_u \cdot (B+1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (B+1)^2}}$

0, 2, 0, 0, 5: $\frac{N_u \cdot (B+1) \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u^2 \cdot (B+1)^2}}$

0, 2, 0, 4, 5: $\frac{N_u \cdot (B+1) \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{N_u^2 \cdot (B+1)^2}}$

1, 2, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^2} \cdot (A+B)}{A \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$

1, 2, 0, 4, 0: $\frac{N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A+B)}{A \cdot D \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$

1, 2, 0, 0, 5: $\frac{N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A+B)}{A \cdot E \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$

1, 2, 0, 4, 5: $\frac{N_u \cdot (A+B) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{N_u^2 \cdot (A+B)^2}}$

0, 0, 3, 0, 0: $\frac{C \cdot N_u}{\sqrt{C^2 \cdot N_u^2}}$

0, 0, 3, 4, 0: $\frac{C \cdot N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 0, 3, 0, 5: $\frac{C \cdot N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 0, 3, 4, 5: $\frac{C \cdot N_u \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 0: $\frac{C \cdot N_u \cdot (A+1) \cdot \sqrt{A^2}}{A \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A+1)^2}}$

1, 0, 3, 4, 0: $\frac{C \cdot N_u \cdot (A+1) \cdot \sqrt{A^2 \cdot D^2}}{A \cdot D \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A+1)^2}}$

1, 0, 3, 0, 5: $\frac{C \cdot N_u \cdot (A+1) \cdot \sqrt{A^2 \cdot E^2}}{A \cdot E \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A+1)^2}}$

1, 0, 3, 4, 5: $\frac{C \cdot N_u \cdot (A+1) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A+1)^2}}$

0, 2, 3, 0, 0: $\frac{C \cdot N_u \cdot (B+1)}{\sqrt{C^2 \cdot N_u^2 \cdot (B+1)^2}}$

0, 2, 3, 4, 0: $\frac{C \cdot N_u \cdot (B+1) \cdot \sqrt{D^2}}{D \cdot \sqrt{C^2 \cdot N_u^2 \cdot (B+1)^2}}$

0, 2, 3, 0, 5: $\frac{C \cdot N_u \cdot (B+1) \cdot \sqrt{E^2}}{E \cdot \sqrt{C^2 \cdot N_u^2 \cdot (B+1)^2}}$

0, 2, 3, 4, 5: $\frac{C \cdot N_u \cdot (B+1) \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{C^2 \cdot N_u^2 \cdot (B+1)^2}}$

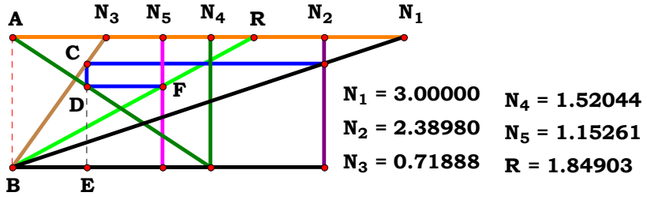
1, 2, 3, 0, 0: $\frac{C \cdot N_u \cdot \sqrt{A^2} \cdot (A+B)}{A \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A+B)^2}}$

1, 2, 3, 4, 0: $\frac{C \cdot N_u \cdot \sqrt{A^2 \cdot D^2} \cdot (A+B)}{A \cdot D \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A+B)^2}}$

1, 2, 3, 0, 5: $\frac{C \cdot N_u \cdot \sqrt{A^2 \cdot E^2} \cdot (A+B)}{A \cdot E \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A+B)^2}}$

1, 2, 3, 4, 5: $\frac{C \cdot N_u \cdot (A+B) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A+B)^2}}$

1CST6R7



Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 2.3898$ $N_3 := .71888$

$N_4 := 1.52044$ $N_5 := 1.15261$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot C \cdot N_u}{E \cdot (B \cdot C - A \cdot D)} = 1.84903$$

$$Num := \frac{B \cdot C \cdot N_u}{\sqrt{(B \cdot C \cdot N_u)^2}}$$

$$Den := \frac{E \cdot (B \cdot C - A \cdot D)}{\sqrt{[E \cdot (B \cdot C - A \cdot D)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (A \cdot D - B \cdot C)^2}}{E \cdot (B \cdot C - A \cdot D) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u{}^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: 0

1, 0, 0, 0, 0: $-\frac{N_u \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{(B-1)^2}}{(B-1) \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 0: $-\frac{B \cdot N_u \cdot \sqrt{(A-B)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot (A-B)}$

0, 0, 3, 0, 0: $\frac{C \cdot N_u \cdot \sqrt{(C-1)^2}}{(C-1) \cdot \sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 0: $-\frac{C \cdot N_u \cdot \sqrt{(A-C)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (A-C)}$

0, 2, 3, 0, 0: $\frac{B \cdot C \cdot N_u \cdot \sqrt{(B \cdot C-1)^2}}{(B \cdot C-1) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 0, 0: $-\frac{B \cdot C \cdot N_u \cdot \sqrt{(A-B \cdot C)^2}}{(A-B \cdot C) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

0, 0, 0, 4, 0: $-\frac{N_u \cdot \sqrt{(D-1)^2}}{(D-1) \cdot \sqrt{N_u^2}}$

1, 0, 0, 4, 0: $-\frac{N_u \cdot \sqrt{(A \cdot D-1)^2}}{\sqrt{N_u^2} \cdot (A \cdot D-1)}$

0, 2, 0, 4, 0: $\frac{B \cdot N_u \cdot \sqrt{(B-D)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot (B-D)}$

1, 2, 0, 4, 0: $\frac{B \cdot N_u \cdot \sqrt{(B-A \cdot D)^2}}{(B-A \cdot D) \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 4, 0: $\frac{C \cdot N_u \cdot \sqrt{(C-D)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (C-D)}$

1, 0, 3, 4, 0: $\frac{C \cdot N_u \cdot \sqrt{(C-A \cdot D)^2}}{(C-A \cdot D) \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 4, 0: $-\frac{B \cdot C \cdot N_u \cdot \sqrt{(D-B \cdot C)^2}}{(D-B \cdot C) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 4, 0: $-\frac{B \cdot C \cdot N_u \cdot \sqrt{(A \cdot D-B \cdot C)^2}}{(A \cdot D-B \cdot C) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

0, 0, 0, 0, 5: 0

1, 0, 0, 0, 5: $-\frac{N_u \cdot \sqrt{E^2 \cdot (A-1)^2}}{E \cdot (A-1) \cdot \sqrt{N_u^2}}$

0, 2, 0, 0, 5: $\frac{B \cdot N_u \cdot \sqrt{E^2 \cdot (B-1)^2}}{E \cdot (B-1) \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 5: $-\frac{B \cdot N_u \cdot \sqrt{E^2 \cdot (A-B)^2}}{E \cdot \sqrt{B^2 \cdot N_u^2} \cdot (A-B)}$

0, 0, 3, 0, 5: $\frac{C \cdot N_u \cdot \sqrt{E^2 \cdot (C-1)^2}}{E \cdot (C-1) \cdot \sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 5: $-\frac{C \cdot N_u \cdot \sqrt{E^2 \cdot (A-C)^2}}{E \cdot \sqrt{C^2 \cdot N_u^2} \cdot (A-C)}$

0, 2, 3, 0, 5: $\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (B \cdot C-1)^2}}{E \cdot (B \cdot C-1) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 0, 5: $-\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (A-B \cdot C)^2}}{E \cdot (A-B \cdot C) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

0, 0, 0, 4, 5: $-\frac{N_u \cdot \sqrt{E^2 \cdot (D-1)^2}}{E \cdot (D-1) \cdot \sqrt{N_u^2}}$

1, 0, 0, 4, 5: $-\frac{N_u \cdot \sqrt{E^2 \cdot (A \cdot D-1)^2}}{E \cdot \sqrt{N_u^2} \cdot (A \cdot D-1)}$

0, 2, 0, 4, 5: $\frac{B \cdot N_u \cdot \sqrt{E^2 \cdot (B-D)^2}}{E \cdot \sqrt{B^2 \cdot N_u^2} \cdot (B-D)}$

1, 2, 0, 4, 5: $\frac{B \cdot N_u \cdot \sqrt{E^2 \cdot (B-A \cdot D)^2}}{E \cdot (B-A \cdot D) \cdot \sqrt{B^2 \cdot N_u^2}}$

0, 0, 3, 4, 5: $\frac{C \cdot N_u \cdot \sqrt{E^2 \cdot (C-D)^2}}{E \cdot \sqrt{C^2 \cdot N_u^2} \cdot (C-D)}$

1, 0, 3, 4, 5: $\frac{C \cdot N_u \cdot \sqrt{E^2 \cdot (C-A \cdot D)^2}}{E \cdot (C-A \cdot D) \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 4, 5: $-\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (D-B \cdot C)^2}}{E \cdot (D-B \cdot C) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

1, 2, 3, 4, 5: $\frac{B \cdot C \cdot N_u \cdot \sqrt{E^2 \cdot (A \cdot D-B \cdot C)^2}}{E \cdot (B \cdot C-A \cdot D) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2}}$

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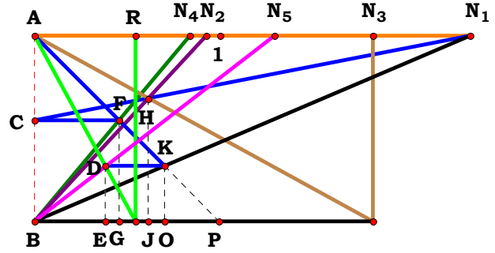
Descriptions.



$N_1 = 2.34137$
$N_2 = 0.92535$
$N_3 = 1.82306$
$N_4 = 0.83275$
$N_5 = 1.28821$
$R = 0.54592$

Unit. $AB := 1$ **Given.** $N_1 := 2.34137$ $N_2 := .92535$ $N_3 := 1.82306$

$N_4 := .83275$ $N_5 := 1.28821$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

$$\frac{A \cdot N_u \cdot (B - A)}{C \cdot D \cdot E} = 0.545916$$

$$Num := \frac{A \cdot N_u \cdot (B - A)}{\sqrt{\left[A \cdot N_u \cdot (B - A)\right]^2}}$$

$$Den := \frac{C \cdot D \cdot E}{\sqrt{(C \cdot D \cdot E)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

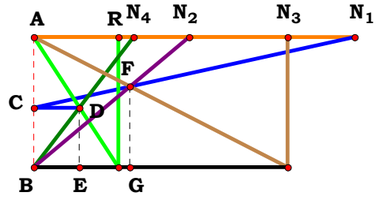
$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot (B - A) \cdot \sqrt{C^2 \cdot D^2 \cdot E^2}}{C \cdot D \cdot E \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot (A - B)^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0:	**0**	**0, 0, 0, 4, 0:**	**0**	**0, 0, 0, 0, 5:**	**0**	**0, 0, 0, 4, 5:**	**0**
1, 0, 0, 0, 0:	$-\frac{A \cdot N_u \cdot (A-1)}{\sqrt{A^2 \cdot {N_u}^2 \cdot (A-1)^2}}$	**1, 0, 0, 4, 0:**	$-\frac{A \cdot N_u \cdot (A-1) \cdot \sqrt{D^2}}{D \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-1)^2}}$	**1, 0, 0, 0, 5:**	$-\frac{A \cdot N_u \cdot (A-1) \cdot \sqrt{E^2}}{E \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-1)^2}}$	**1, 0, 0, 4, 5:**	$-\frac{A \cdot N_u \cdot (A-1) \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-1)^2}}$
0, 2, 0, 0, 0:	$\frac{N_u \cdot (B-1)}{\sqrt{{N_u}^2 \cdot (B-1)^2}}$	**0, 2, 0, 4, 0:**	$\frac{N_u \cdot (B-1) \cdot \sqrt{D^2}}{D \cdot \sqrt{{N_u}^2 \cdot (B-1)^2}}$	**0, 2, 0, 0, 5:**	$\frac{N_u \cdot (B-1) \cdot \sqrt{E^2}}{E \cdot \sqrt{{N_u}^2 \cdot (B-1)^2}}$	**0, 2, 0, 4, 5:**	$\frac{N_u \cdot (B-1) \cdot \sqrt{D^2 \cdot E^2}}{D \cdot E \cdot \sqrt{{N_u}^2 \cdot (B-1)^2}}$
1, 2, 0, 0, 0:	$-\frac{A \cdot N_u \cdot (A-B)}{\sqrt{A^2 \cdot {N_u}^2 \cdot (A-B)^2}}$	**1, 2, 0, 4, 0:**	$-\frac{A \cdot N_u \cdot \sqrt{D^2} \cdot (A-B)}{D \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-B)^2}}$	**1, 2, 0, 0, 5:**	$-\frac{A \cdot N_u \cdot \sqrt{E^2} \cdot (A-B)}{E \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-B)^2}}$	**1, 2, 0, 4, 5:**	$-\frac{A \cdot N_u \cdot \sqrt{D^2 \cdot E^2} \cdot (A-B)}{D \cdot E \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-B)^2}}$
0, 0, 3, 0, 0:	**0**	**0, 0, 3, 4, 0:**	**0**	**0, 0, 3, 0, 5:**	**0**	**0, 0, 3, 4, 5:**	**0**
1, 0, 3, 0, 0:	$-\frac{A \cdot N_u \cdot (A-1) \cdot \sqrt{C^2}}{C \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-1)^2}}$	**1, 0, 3, 4, 0:**	$-\frac{A \cdot N_u \cdot (A-1) \cdot \sqrt{C^2 \cdot D^2}}{C \cdot D \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-1)^2}}$	**1, 0, 3, 0, 5:**	$-\frac{A \cdot N_u \cdot (A-1) \cdot \sqrt{C^2 \cdot E^2}}{C \cdot E \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-1)^2}}$	**1, 0, 3, 4, 5:**	$-\frac{A \cdot N_u \cdot (A-1) \cdot \sqrt{C^2 \cdot D^2 \cdot E^2}}{C \cdot D \cdot E \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-1)^2}}$
0, 2, 3, 0, 0:	$\frac{N_u \cdot (B-1) \cdot \sqrt{C^2}}{C \cdot \sqrt{{N_u}^2 \cdot (B-1)^2}}$	**0, 2, 3, 4, 0:**	$\frac{N_u \cdot (B-1) \cdot \sqrt{C^2 \cdot D^2}}{C \cdot D \cdot \sqrt{{N_u}^2 \cdot (B-1)^2}}$	**0, 2, 3, 0, 5:**	$\frac{N_u \cdot (B-1) \cdot \sqrt{C^2 \cdot E^2}}{C \cdot E \cdot \sqrt{{N_u}^2 \cdot (B-1)^2}}$	**0, 2, 3, 4, 5:**	$\frac{N_u \cdot (B-1) \cdot \sqrt{C^2 \cdot D^2 \cdot E^2}}{C \cdot D \cdot E \cdot \sqrt{{N_u}^2 \cdot (B-1)^2}}$
1, 2, 3, 0, 0:	$-\frac{A \cdot N_u \cdot \sqrt{C^2} \cdot (A-B)}{C \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-B)^2}}$	**1, 2, 3, 4, 0:**	$-\frac{A \cdot N_u \cdot \sqrt{C^2 \cdot D^2} \cdot (A-B)}{C \cdot D \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-B)^2}}$	**1, 2, 3, 0, 5:**	$-\frac{A \cdot N_u \cdot \sqrt{C^2 \cdot E^2} \cdot (A-B)}{C \cdot E \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-B)^2}}$	**1, 2, 3, 4, 5:**	$\frac{A \cdot N_u \cdot (B-A) \cdot \sqrt{C^2 \cdot D^2 \cdot E^2}}{C \cdot D \cdot E \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A-B)^2}}$

1CST7R1



$N_1 = 2.45760$
$N_2 = 1.18876$
$N_3 = 1.94898$
$N_4 = 0.76495$
$R = 0.64750$

Unit. $AB := 1$ Given. $N_1 := 2.45760$ $N_2 := 1.18876$ $N_3 := 1.94898$ $N_4 := .76495$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (B - A)}{C \cdot D} = 0.647503 \qquad Num := \frac{N_u \cdot (B - A)}{\sqrt{\left[N_u \cdot (B - A)\right]^2}} \qquad Den := \frac{C \cdot D}{\sqrt{(C \cdot D)^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{C^2 \cdot D^2} \cdot (B - A)}{C \cdot D \cdot \sqrt{N_u{}^2 \cdot (A - B)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0: $-\frac{N_u \cdot (A-1)}{\sqrt{N_u^2 \cdot (A-1)^2}}$

0, 2, 0, 0: $\frac{N_u \cdot (B-1)}{\sqrt{N_u^2 \cdot (B-1)^2}}$

1, 2, 0, 0: $-\frac{N_u \cdot (A-B)}{\sqrt{N_u^2 \cdot (A-B)^2}}$

0, 0, 3, 0: 0

1, 0, 3, 0: $-\frac{N_u \cdot (A-1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (A-1)^2}}$

0, 2, 3, 0: $\frac{N_u \cdot (B-1) \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^2 \cdot (B-1)^2}}$

1, 2, 3, 0: $-\frac{N_u \cdot \sqrt{C^2} \cdot (A-B)}{C \cdot \sqrt{N_u^2 \cdot (A-B)^2}}$

0, 0, 0, 4: 0

1, 0, 0, 4: $-\frac{N_u \cdot (A-1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (A-1)^2}}$

0, 2, 0, 4: $\frac{N_u \cdot (B-1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2 \cdot (B-1)^2}}$

1, 2, 0, 4: $-\frac{N_u \cdot \sqrt{D^2} \cdot (A-B)}{D \cdot \sqrt{N_u^2 \cdot (A-B)^2}}$

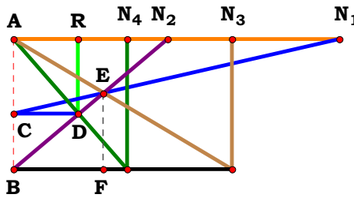
0, 0, 3, 4: 0

1, 0, 3, 4: $-\frac{N_u \cdot (A-1) \cdot \sqrt{C^2 \cdot D^2}}{C \cdot D \cdot \sqrt{N_u^2 \cdot (A-1)^2}}$

0, 2, 3, 4: $\frac{N_u \cdot (B-1) \cdot \sqrt{C^2 \cdot D^2}}{C \cdot D \cdot \sqrt{N_u^2 \cdot (B-1)^2}}$

1, 2, 3, 4: $\frac{N_u \cdot \sqrt{C^2 \cdot D^2} \cdot (B-A)}{C \cdot D \cdot \sqrt{N_u^2 \cdot (A-B)^2}}$

1CST7R2



$N_1 = 2.49634$
$N_2 = 1.17907$
$N_3 = 1.67778$
$N_4 = 0.87149$
$R = 0.49775$

Unit. $AB := 1$ **Given.** $N_1 := 2.49634$ $N_2 := 1.17907$ $N_3 := 1.67778$ $N_4 := .87149$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{C \cdot N_u}{D \cdot (B - A + C)} = 0.497746$$

$$Num := \frac{C \cdot N_u}{\sqrt{(C \cdot N_u)^2}}$$

$$Den := \frac{D \cdot (B - A + C)}{\sqrt{[D \cdot (B - A + C)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot N_u \cdot \sqrt{D^2 \cdot (B - A + C)^2}}{D \cdot \sqrt{C^2 \cdot N_u{}^2} \cdot (B - A + C)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0: $-\frac{N_u \cdot \sqrt{(A-2)^2}}{(A-2) \cdot \sqrt{N_u^2}}$

0, 2, 0, 0: $\frac{N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2}}$

1, 2, 0, 0: $\frac{N_u \cdot \sqrt{(B-A+1)^2}}{\sqrt{N_u^2} \cdot (B-A+1)}$

0, 0, 3, 0: $\frac{N_u \cdot \sqrt{C^2}}{\sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0: $\frac{C \cdot N_u \cdot \sqrt{(C-A+1)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (C-A+1)}$

0, 2, 3, 0: $\frac{C \cdot N_u \cdot \sqrt{(B+C-1)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (B+C-1)}$

1, 2, 3, 0: $\frac{C \cdot N_u \cdot \sqrt{(B-A+C)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (B-A+C)}$

0, 0, 0, 4: $\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2}}$

1, 0, 0, 4: $-\frac{N_u \cdot \sqrt{D^2 \cdot (A-2)^2}}{D \cdot (A-2) \cdot \sqrt{N_u^2}}$

0, 2, 0, 4: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2}}{B \cdot D \cdot \sqrt{N_u^2}}$

1, 2, 0, 4: $\frac{N_u \cdot \sqrt{D^2 \cdot (B-A+1)^2}}{D \cdot \sqrt{N_u^2} \cdot (B-A+1)}$

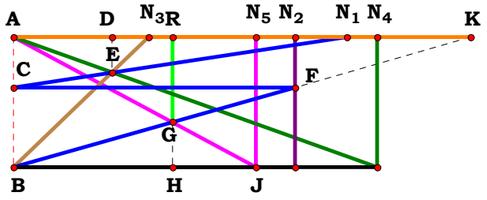
0, 0, 3, 4: $\frac{N_u \cdot \sqrt{C^2 \cdot D^2}}{D \cdot \sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 4: $\frac{C \cdot N_u \cdot \sqrt{D^2 \cdot (C-A+1)^2}}{D \cdot \sqrt{C^2 \cdot N_u^2} \cdot (C-A+1)}$

0, 2, 3, 4: $\frac{C \cdot N_u \cdot \sqrt{D^2 \cdot (B+C-1)^2}}{D \cdot \sqrt{C^2 \cdot N_u^2} \cdot (B+C-1)}$

1, 2, 3, 4: $\frac{C \cdot N_u \cdot \sqrt{D^2 \cdot (B-A+C)^2}}{D \cdot \sqrt{C^2 \cdot N_u^2} \cdot (B-A+C)}$

1CST7R3



$N_1 = 2.55445$
$N_2 = 2.15734$
$N_3 = 1.03851$
$N_4 = 2.78928$
$N_5 = 1.85967$
$R = 1.21571$

Unit. $AB := 1$ Given. $N_1 := 2.55445$ $N_2 := 2.15734$ $N_3 := 1.03851$

$N_4 := 2.78928$ $N_5 := 1.85967$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot (C - A + D)}{B \cdot C - A \cdot B - A \cdot E + C \cdot E + D \cdot E} = 1.215712$$

$$Num := \frac{N_u \cdot (C - A + D)}{\sqrt{\left[N_u \cdot (C - A + D)\right]^2}}$$

$$Den := \frac{B \cdot C - A \cdot B - A \cdot E + C \cdot E + D \cdot E}{\sqrt{(B \cdot C - A \cdot B - A \cdot E + C \cdot E + D \cdot E)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{(B \cdot C - A \cdot B - A \cdot E + C \cdot E + D \cdot E)^2} \cdot (A - C - D)}{\sqrt{N_u^2 \cdot (C - A + D)^2} \cdot (A \cdot B - B \cdot C + A \cdot E - C \cdot E - D \cdot E)} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{(2 \cdot A - 3)^2} \cdot (A - 2)}{(2 \cdot A - 3) \cdot \sqrt{N_u^2 \cdot (A - 2)^2}}$

0, 2, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 2, 0, 0, 0: $\frac{N_u \cdot (A - 2) \cdot \sqrt{(A - B + A \cdot B - 2)^2}}{\sqrt{N_u^2 \cdot (A - 2)^2} \cdot (A - B + A \cdot B - 2)}$

0, 0, 3, 0, 0: $\frac{C \cdot N_u \cdot \sqrt{(2 \cdot C - 1)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (2 \cdot C - 1)}$

1, 0, 3, 0, 0: $\frac{N_u \cdot \sqrt{(2 \cdot C - 2 \cdot A + 1)^2} \cdot (C - A + 1)}{\sqrt{N_u^2 \cdot (C - A + 1)^2} \cdot (2 \cdot C - 2 \cdot A + 1)}$

0, 2, 3, 0, 0: $\frac{C \cdot N_u \cdot \sqrt{(C - B + B \cdot C)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (C - B + B \cdot C)}$

1, 2, 3, 0, 0: $\frac{N_u \cdot \sqrt{(C - A - A \cdot B + B \cdot C + 1)^2} \cdot (C - A + 1)}{\sqrt{N_u^2 \cdot (C - A + 1)^2} \cdot (C - A - A \cdot B + B \cdot C + 1)}$

0, 0, 0, 4, 0: $\frac{N_u \cdot \sqrt{D^2}}{\sqrt{D^2 \cdot N_u^2}}$

1, 0, 0, 4, 0: $\frac{N_u \cdot \sqrt{(D - 2 \cdot A + 2)^2} \cdot (D - A + 1)}{\sqrt{N_u^2 \cdot (D - A + 1)^2} \cdot (D - 2 \cdot A + 2)}$

0, 2, 0, 4, 0: $\frac{N_u \cdot \sqrt{D^2}}{\sqrt{D^2 \cdot N_u^2}}$

1, 2, 0, 4, 0: $\frac{N_u \cdot \sqrt{(B - A + D - A \cdot B + 1)^2} \cdot (D - A + 1)}{\sqrt{N_u^2 \cdot (D - A + 1)^2} \cdot (B - A + D - A \cdot B + 1)}$

0, 0, 3, 4, 0: $\frac{N_u \cdot \sqrt{(2 \cdot C + D - 2)^2} \cdot (C + D - 1)}{\sqrt{N_u^2 \cdot (C + D - 1)^2} \cdot (2 \cdot C + D - 2)}$

1, 0, 3, 4, 0: $\frac{N_u \cdot \sqrt{(2 \cdot C - 2 \cdot A + D)^2} \cdot (C - A + D)}{\sqrt{N_u^2 \cdot (C - A + D)^2} \cdot (2 \cdot C - 2 \cdot A + D)}$

0, 2, 3, 4, 0: $\frac{N_u \cdot \sqrt{(C - B + D + B \cdot C - 1)^2} \cdot (C + D - 1)}{\sqrt{N_u^2 \cdot (C + D - 1)^2} \cdot (C - B + D + B \cdot C - 1)}$

1, 2, 3, 4, 0: $\frac{N_u \cdot \sqrt{(C - A + D - A \cdot B + B \cdot C)^2} \cdot (C - A + D)}{\sqrt{N_u^2 \cdot (C - A + D)^2} \cdot (C - A + D - A \cdot B + B \cdot C)}$

0, 0, 0, 0, 5: $$\frac{N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u{}^2}}$$

1, 0, 0, 0, 5: $$\frac{N_u \cdot (A-2) \cdot \sqrt{(A-2 \cdot E+A \cdot E-1)^2}}{\sqrt{N_u{}^2 \cdot (A-2)^2} \cdot (A-2 \cdot E+A \cdot E-1)}$$

0, 2, 0, 0, 5: $$\frac{N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u{}^2}}$$

1, 2, 0, 0, 5: $$-\frac{N_u \cdot (A-2) \cdot \sqrt{(B+2 \cdot E-A \cdot B-A \cdot E)^2}}{\sqrt{N_u{}^2 \cdot (A-2)^2} \cdot (B+2 \cdot E-A \cdot B-A \cdot E)}$$

0, 0, 3, 0, 5: $$\frac{C \cdot N_u \cdot \sqrt{(C+C \cdot E-1)^2}}{\sqrt{C^2 \cdot N_u{}^2} \cdot (C+C \cdot E-1)}$$

1, 0, 3, 0, 5: $$\frac{N_u \cdot \sqrt{(C-A+E-A \cdot E+C \cdot E)^2} \cdot (C-A+1)}{\sqrt{N_u{}^2 \cdot (C-A+1)^2} \cdot (C-A+E-A \cdot E+C \cdot E)}$$

0, 2, 3, 0, 5: $$\frac{C \cdot N_u \cdot \sqrt{(B \cdot C-B+C \cdot E)^2}}{\sqrt{C^2 \cdot N_u{}^2} \cdot (B \cdot C-B+C \cdot E)}$$

1, 2, 3, 0, 5: $$\frac{N_u \cdot \sqrt{(E-A \cdot B+B \cdot C-A \cdot E+C \cdot E)^2} \cdot (C-A+1)}{\sqrt{N_u{}^2 \cdot (C-A+1)^2} \cdot (E-A \cdot B+B \cdot C-A \cdot E+C \cdot E)}$$

0, 0, 0, 4, 5: $$\frac{N_u \cdot \sqrt{D^2 \cdot E^2}}{E \cdot \sqrt{D^2 \cdot N_u{}^2}}$$

1, 0, 0, 4, 5: $$\frac{N_u \cdot \sqrt{(E-A-A \cdot E+D \cdot E+1)^2} \cdot (D-A+1)}{\sqrt{N_u{}^2 \cdot (D-A+1)^2} \cdot (E-A-A \cdot E+D \cdot E+1)}$$

0, 2, 0, 4, 5: $$\frac{N_u \cdot \sqrt{D^2 \cdot E^2}}{E \cdot \sqrt{D^2 \cdot N_u{}^2}}$$

1, 2, 0, 4, 5: $$\frac{N_u \cdot \sqrt{(B+E-A \cdot B-A \cdot E+D \cdot E)^2} \cdot (D-A+1)}{\sqrt{N_u{}^2 \cdot (D-A+1)^2} \cdot (B+E-A \cdot B-A \cdot E+D \cdot E)}$$

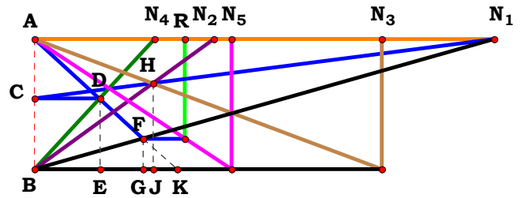
0, 0, 3, 4, 5: $$\frac{N_u \cdot \sqrt{(C-E+C \cdot E+D \cdot E-1)^2} \cdot (C+D-1)}{\sqrt{N_u{}^2 \cdot (C+D-1)^2} \cdot (C-E+C \cdot E+D \cdot E-1)}$$

1, 0, 3, 4, 5: $$\frac{N_u \cdot \sqrt{(C-A-A \cdot E+C \cdot E+D \cdot E)^2} \cdot (C-A+D)}{\sqrt{N_u{}^2 \cdot (C-A+D)^2} \cdot (C-A-A \cdot E+C \cdot E+D \cdot E)}$$

0, 2, 3, 4, 5: $$\frac{N_u \cdot \sqrt{(B \cdot C-E-B+C \cdot E+D \cdot E)^2} \cdot (C+D-1)}{\sqrt{N_u{}^2 \cdot (C+D-1)^2} \cdot (B \cdot C-E-B+C \cdot E+D \cdot E)}$$

1, 2, 3, 4, 5: $$\frac{N_u \cdot \sqrt{(B \cdot C-A \cdot B-A \cdot E+C \cdot E+D \cdot E)^2} \cdot (A-C-D)}{\sqrt{N_u{}^2 \cdot (C-A+D)^2} \cdot (A \cdot B-B \cdot C+A \cdot E-C \cdot E-D \cdot E)}$$

1CST7R4



$N_1 = 3.52303$
$N_2 = 1.37279$
$N_3 = 2.66573$
$N_4 = 0.91992$
$N_5 = 1.51098$
$R = 1.15389$

Unit. $AB := 1$ Given. $N_1 := 3.52303$ $N_2 := 1.37279$ $N_3 := 2.66573$

$N_4 := .91992$ $N_5 := 1.51098$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{C \cdot D \cdot N_u}{E \cdot \left(B \cdot A - A^2 + C \cdot D\right)} = 1.153888$$

$$Num := \frac{C \cdot D \cdot N_u}{\sqrt{\left(C \cdot D \cdot N_u\right)^2}}$$

$$Den := \frac{E \cdot \left(B \cdot A - A^2 + C \cdot D\right)}{\sqrt{\left[E \cdot \left(B \cdot A - A^2 + C \cdot D\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot D \cdot N_u \cdot \sqrt{E^2 \cdot \left(B \cdot A - A^2 + C \cdot D\right)^2}}{E \cdot \sqrt{C^2 \cdot D^2 \cdot N_u{}^2} \cdot \left(B \cdot A - A^2 + C \cdot D\right)} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{\left(-A^2+A+1\right)^2}}{\sqrt{N_u^2} \cdot \left(-A^2+A+1\right)}$

0, 2, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2}}$

1, 2, 0, 0, 0: $\frac{N_u \cdot \sqrt{\left(B \cdot A - A^2 + 1\right)^2}}{\sqrt{N_u^2} \cdot \left(B \cdot A - A^2 + 1\right)}$

0, 0, 3, 0, 0: $\frac{N_u \cdot \sqrt{C^2}}{\sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 0: $\frac{C \cdot N_u \cdot \sqrt{\left(A - A^2 + C\right)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot \left(A - A^2 + C\right)}$

0, 2, 3, 0, 0: $\frac{C \cdot N_u \cdot \sqrt{(B + C - 1)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (B + C - 1)}$

1, 2, 3, 0, 0: $\frac{C \cdot N_u \cdot \sqrt{\left(B \cdot A - A^2 + C\right)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot \left(B \cdot A - A^2 + C\right)}$

0, 0, 0, 4, 0: $\frac{N_u \cdot \sqrt{D^2}}{\sqrt{D^2 \cdot N_u^2}}$

1, 0, 0, 4, 0: $\frac{D \cdot N_u \cdot \sqrt{\left(A - A^2 + D\right)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot \left(A - A^2 + D\right)}$

0, 2, 0, 4, 0: $\frac{D \cdot N_u \cdot \sqrt{(B + D - 1)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot (B + D - 1)}$

1, 2, 0, 4, 0: $\frac{D \cdot N_u \cdot \sqrt{\left(B \cdot A - A^2 + D\right)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot \left(B \cdot A - A^2 + D\right)}$

0, 0, 3, 4, 0: $\frac{N_u \cdot \sqrt{C^2 \cdot D^2}}{\sqrt{C^2 \cdot D^2 \cdot N_u^2}}$

1, 0, 3, 4, 0: $\frac{C \cdot D \cdot N_u \cdot \sqrt{\left(-A^2 + A + C \cdot D\right)^2}}{\sqrt{C^2 \cdot D^2 \cdot N_u^2} \cdot \left(-A^2 + A + C \cdot D\right)}$

0, 2, 3, 4, 0: $\frac{C \cdot D \cdot N_u \cdot \sqrt{(B + C \cdot D - 1)^2}}{\sqrt{C^2 \cdot D^2 \cdot N_u^2} \cdot (B + C \cdot D - 1)}$

1, 2, 3, 4, 0: $\frac{C \cdot D \cdot N_u \cdot \sqrt{\left(B \cdot A - A^2 + C \cdot D\right)^2}}{\sqrt{C^2 \cdot D^2 \cdot N_u^2} \cdot \left(B \cdot A - A^2 + C \cdot D\right)}$

0, 0, 0, 0, 5: $\frac{N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u{}^2}}$

1, 0, 0, 0, 5: $\frac{N_u \cdot \sqrt{E^2 \cdot (A - A^2 + 1)^2}}{E \cdot \sqrt{N_u{}^2} \cdot (A - A^2 + 1)}$

0, 2, 0, 0, 5: $\frac{N_u \cdot \sqrt{B^2 \cdot E^2}}{B \cdot E \cdot \sqrt{N_u{}^2}}$

1, 2, 0, 0, 5: $\frac{N_u \cdot \sqrt{E^2 \cdot (B \cdot A - A^2 + 1)^2}}{E \cdot \sqrt{N_u{}^2} \cdot (B \cdot A - A^2 + 1)}$

0, 0, 3, 0, 5: $\frac{N_u \cdot \sqrt{C^2 \cdot E^2}}{E \cdot \sqrt{C^2 \cdot N_u{}^2}}$

1, 0, 3, 0, 5: $\frac{C \cdot N_u \cdot \sqrt{E^2 \cdot (A - A^2 + C)^2}}{E \cdot \sqrt{C^2 \cdot N_u{}^2} \cdot (A - A^2 + C)}$

0, 2, 3, 0, 5: $\frac{C \cdot N_u \cdot \sqrt{E^2 \cdot (B + C - 1)^2}}{E \cdot \sqrt{C^2 \cdot N_u{}^2} \cdot (B + C - 1)}$

1, 2, 3, 0, 5: $\frac{C \cdot N_u \cdot \sqrt{E^2 \cdot (B \cdot A - A^2 + C)^2}}{E \cdot \sqrt{C^2 \cdot N_u{}^2} \cdot (B \cdot A - A^2 + C)}$

0, 0, 0, 4, 5: $\frac{N_u \cdot \sqrt{D^2 \cdot E^2}}{E \cdot \sqrt{D^2 \cdot N_u{}^2}}$

1, 0, 0, 4, 5: $\frac{D \cdot N_u \cdot \sqrt{E^2 \cdot (A - A^2 + D)^2}}{E \cdot \sqrt{D^2 \cdot N_u{}^2} \cdot (A - A^2 + D)}$

0, 2, 0, 4, 5: $\frac{D \cdot N_u \cdot \sqrt{E^2 \cdot (B + D - 1)^2}}{E \cdot \sqrt{D^2 \cdot N_u{}^2} \cdot (B + D - 1)}$

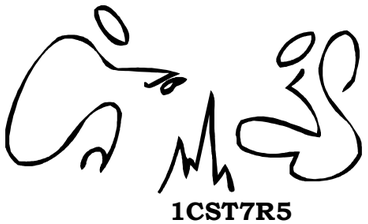
1, 2, 0, 4, 5: $\frac{D \cdot N_u \cdot \sqrt{E^2 \cdot (B \cdot A - A^2 + D)^2}}{E \cdot \sqrt{D^2 \cdot N_u{}^2} \cdot (B \cdot A - A^2 + D)}$

0, 0, 3, 4, 5: $\frac{N_u \cdot \sqrt{C^2 \cdot D^2 \cdot E^2}}{E \cdot \sqrt{C^2 \cdot D^2 \cdot N_u{}^2}}$

1, 0, 3, 4, 5: $\frac{C \cdot D \cdot N_u \cdot \sqrt{E^2 \cdot (A - A^2 + C \cdot D)^2}}{E \cdot \sqrt{C^2 \cdot D^2 \cdot N_u{}^2} \cdot (A - A^2 + C \cdot D)}$

0, 2, 3, 4, 5: $\frac{C \cdot D \cdot N_u \cdot \sqrt{E^2 \cdot (B + C \cdot D - 1)^2}}{E \cdot \sqrt{C^2 \cdot D^2 \cdot N_u{}^2} \cdot (B + C \cdot D - 1)}$

1, 2, 3, 4, 5: $\frac{C \cdot D \cdot N_u \cdot \sqrt{E^2 \cdot (B \cdot A - A^2 + C \cdot D)^2}}{E \cdot \sqrt{C^2 \cdot D^2 \cdot N_u{}^2} \cdot (B \cdot A - A^2 + C \cdot D)}$



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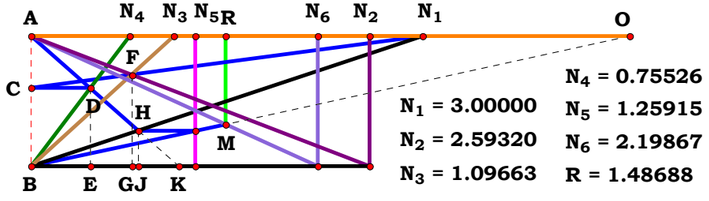

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 2.5932$ $N_3 := 1.09663$

$N_4 := .75526$ $N_5 := 1.25915$ $N_6 := 2.19867$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u \cdot (C \cdot A - A^2 + B \cdot D)}{A \cdot C \cdot E - A^2 \cdot F - A^2 \cdot E + A \cdot C \cdot F + B \cdot D \cdot F} = 1.486876$$

$$Num := \frac{N_u \cdot (C \cdot A - A^2 + B \cdot D)}{\sqrt{\left[N_u \cdot (C \cdot A - A^2 + B \cdot D)\right]^2}}$$

$$Den := \frac{A \cdot C \cdot E - A^2 \cdot F - A^2 \cdot E + A \cdot C \cdot F + B \cdot D \cdot F}{\sqrt{(A \cdot C \cdot E - A^2 \cdot F - A^2 \cdot E + A \cdot C \cdot F + B \cdot D \cdot F)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{(A \cdot C \cdot E - A^2 \cdot F - A^2 \cdot E + A \cdot C \cdot F + B \cdot D \cdot F)^2} \cdot (A^2 - C \cdot A - B \cdot D)}{\sqrt{N_u^2 \cdot (C \cdot A - A^2 + B \cdot D)^2} \cdot (A^2 \cdot E + A^2 \cdot F - A \cdot C \cdot E - A \cdot C \cdot F - B \cdot D \cdot F)} = 0$$

For 6 variables there are 64 subsets.

0, 0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{\left(2 \cdot A - 2 \cdot A^2 + 1\right)^2} \cdot \left(-A^2 + A + 1\right)}{\sqrt{N_u^2 \cdot \left(A - A^2 + 1\right)^2} \cdot \left(2 \cdot A - 2 \cdot A^2 + 1\right)}$

0, 2, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2}}{\sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{\left(2 \cdot A - 2 \cdot A^2 + B\right)^2} \cdot \left(A - A^2 + B\right)}{\sqrt{N_u^2 \cdot \left(A - A^2 + B\right)^2} \cdot \left(2 \cdot A - 2 \cdot A^2 + B\right)}$

0, 0, 3, 0, 0, 0: $\frac{C \cdot N_u \cdot \sqrt{(2 \cdot C - 1)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (2 \cdot C - 1)}$

1, 0, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{\left(2 \cdot C \cdot A - 2 \cdot A^2 + 1\right)^2} \cdot \left(C \cdot A - A^2 + 1\right)}{\sqrt{N_u^2 \cdot \left(C \cdot A - A^2 + 1\right)^2} \cdot \left(2 \cdot C \cdot A - 2 \cdot A^2 + 1\right)}$

0, 2, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{(B + 2 \cdot C - 2)^2} \cdot (B + C - 1)}{\sqrt{N_u^2 \cdot (B + C - 1)^2} \cdot (B + 2 \cdot C - 2)}$

1, 2, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{\left(2 \cdot C \cdot A - 2 \cdot A^2 + B\right)^2} \cdot \left(C \cdot A - A^2 + B\right)}{\sqrt{N_u^2 \cdot \left(C \cdot A - A^2 + B\right)^2} \cdot \left(2 \cdot C \cdot A - 2 \cdot A^2 + B\right)}$

0, 0, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{D^2}}{\sqrt{D^2 \cdot N_u^2}}$

1, 0, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{\left(2 \cdot A - 2 \cdot A^2 + D\right)^2} \cdot \left(A - A^2 + D\right)}{\sqrt{N_u^2 \cdot \left(A - A^2 + D\right)^2} \cdot \left(2 \cdot A - 2 \cdot A^2 + D\right)}$

0, 2, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2}}$

1, 2, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{\left(2 \cdot A - 2 \cdot A^2 + B \cdot D\right)^2} \cdot \left(-A^2 + A + B \cdot D\right)}{\sqrt{N_u^2 \cdot \left(A - A^2 + B \cdot D\right)^2} \cdot \left(2 \cdot A - 2 \cdot A^2 + B \cdot D\right)}$

0, 0, 3, 4, 0, 0: $\frac{N_u \cdot \sqrt{(2 \cdot C + D - 2)^2} \cdot (C + D - 1)}{\sqrt{N_u^2 \cdot (C + D - 1)^2} \cdot (2 \cdot C + D - 2)}$

1, 0, 3, 4, 0, 0: $\frac{N_u \cdot \sqrt{\left(2 \cdot C \cdot A - 2 \cdot A^2 + D\right)^2} \cdot \left(C \cdot A - A^2 + D\right)}{\sqrt{N_u^2 \cdot \left(C \cdot A - A^2 + D\right)^2} \cdot \left(2 \cdot C \cdot A - 2 \cdot A^2 + D\right)}$

0, 2, 3, 4, 0, 0: $\frac{N_u \cdot \sqrt{(2 \cdot C + B \cdot D - 2)^2} \cdot (C + B \cdot D - 1)}{\sqrt{N_u^2 \cdot (C + B \cdot D - 1)^2} \cdot (2 \cdot C + B \cdot D - 2)}$

1, 2, 3, 4, 0, 0: $\frac{N_u \cdot \sqrt{\left(2 \cdot C \cdot A - 2 \cdot A^2 + B \cdot D\right)^2} \cdot \left(C \cdot A - A^2 + B \cdot D\right)}{\sqrt{N_u^2 \cdot \left(C \cdot A - A^2 + B \cdot D\right)^2} \cdot \left(2 \cdot C \cdot A - 2 \cdot A^2 + B \cdot D\right)}$

0, 0, 0, 0, 5, 0:

$$\frac{N_u}{\sqrt{N_u^2}}$$

1, 0, 0, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{\left(A - A^2 + A \cdot E - A^2 \cdot E + 1\right)^2} \cdot \left(-A^2 + A + 1\right)}{\sqrt{N_u^2 \cdot \left(A - A^2 + 1\right)^2} \cdot \left(A - A^2 + A \cdot E - A^2 \cdot E + 1\right)}$$

0, 2, 0, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{B^2}}{\sqrt{B^2 \cdot N_u^2}}$$

1, 2, 0, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{\left(A + B - A^2 + A \cdot E - A^2 \cdot E\right)^2} \cdot \left(A - A^2 + B\right)}{\sqrt{N_u^2 \cdot \left(A - A^2 + B\right)^2} \cdot \left(A + B - A^2 + A \cdot E - A^2 \cdot E\right)}$$

0, 0, 3, 0, 5, 0:

$$\frac{C \cdot N_u \cdot \sqrt{(C - E + C \cdot E)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (C - E + C \cdot E)}$$

1, 0, 3, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{\left(A \cdot C - A^2 - A^2 \cdot E + A \cdot C \cdot E + 1\right)^2} \cdot \left(C \cdot A - A^2 + 1\right)}{\sqrt{N_u^2 \cdot \left(C \cdot A - A^2 + 1\right)^2} \cdot \left(A \cdot C - A^2 - A^2 \cdot E + A \cdot C \cdot E + 1\right)}$$

0, 2, 3, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{(B + C - E + C \cdot E - 1)^2} \cdot (B + C - 1)}{\sqrt{N_u^2 \cdot (B + C - 1)^2} \cdot (B + C - E + C \cdot E - 1)}$$

1, 2, 3, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{\left(B - A^2 + A \cdot C - A^2 \cdot E + A \cdot C \cdot E\right)^2} \cdot \left(C \cdot A - A^2 + B\right)}{\sqrt{N_u^2 \cdot \left(C \cdot A - A^2 + B\right)^2} \cdot \left(B - A^2 + A \cdot C - A^2 \cdot E + A \cdot C \cdot E\right)}$$

0, 0, 0, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{D^2}}{\sqrt{D^2 \cdot N_u^2}}$$

1, 0, 0, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{\left(A + D - A^2 + A \cdot E - A^2 \cdot E\right)^2} \cdot \left(A - A^2 + D\right)}{\sqrt{N_u^2 \cdot \left(A - A^2 + D\right)^2} \cdot \left(A + D - A^2 + A \cdot E - A^2 \cdot E\right)}$$

0, 2, 0, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot D^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2}}$$

1, 2, 0, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{\left(A - A^2 + A \cdot E + B \cdot D - A^2 \cdot E\right)^2} \cdot \left(-A^2 + A + B \cdot D\right)}{\sqrt{N_u^2 \cdot \left(A - A^2 + B \cdot D\right)^2} \cdot \left(A - A^2 + A \cdot E + B \cdot D - A^2 \cdot E\right)}$$

0, 0, 3, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{(C + D - E + C \cdot E - 1)^2} \cdot (C + D - 1)}{\sqrt{N_u^2 \cdot (C + D - 1)^2} \cdot (C + D - E + C \cdot E - 1)}$$

1, 0, 3, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{\left(D - A^2 + A \cdot C - A^2 \cdot E + A \cdot C \cdot E\right)^2} \cdot \left(C \cdot A - A^2 + D\right)}{\sqrt{N_u^2 \cdot \left(C \cdot A - A^2 + D\right)^2} \cdot \left(D - A^2 + A \cdot C - A^2 \cdot E + A \cdot C \cdot E\right)}$$

0, 2, 3, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{(C - E + B \cdot D + C \cdot E - 1)^2} \cdot (C + B \cdot D - 1)}{\sqrt{N_u^2 \cdot (C + B \cdot D - 1)^2} \cdot (C - E + B \cdot D + C \cdot E - 1)}$$

1, 2, 3, 4, 5, 0:

$$\frac{N_u \cdot \sqrt{\left(A \cdot C - A^2 + B \cdot D - A^2 \cdot E + A \cdot C \cdot E\right)^2} \cdot \left(C \cdot A - A^2 + B \cdot D\right)}{\sqrt{N_u^2 \cdot \left(C \cdot A - A^2 + B \cdot D\right)^2} \cdot \left(A \cdot C - A^2 + B \cdot D - A^2 \cdot E + A \cdot C \cdot E\right)}$$

0, 0, 0, 0, 0, 6:

$$\frac{N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u{}^2}}$$

1, 0, 0, 0, 0, 6:

$$\frac{N_u \cdot \sqrt{\left(A + F - A^2 + A \cdot F - A^2 \cdot F\right)^2} \cdot \left(-A^2 + A + 1\right)}{\sqrt{N_u{}^2 \cdot \left(A - A^2 + 1\right)^2} \cdot \left(A + F - A^2 + A \cdot F - A^2 \cdot F\right)}$$

0, 2, 0, 0, 0, 6:

$$\frac{N_u \cdot \sqrt{B^2 \cdot F^2}}{F \cdot \sqrt{B^2 \cdot N_u{}^2}}$$

1, 2, 0, 0, 0, 6:

$$\frac{N_u \cdot \sqrt{\left(A - A^2 + A \cdot F + B \cdot F - A^2 \cdot F\right)^2} \cdot \left(A - A^2 + B\right)}{\sqrt{N_u{}^2 \cdot \left(A - A^2 + B\right)^2} \cdot \left(A - A^2 + A \cdot F + B \cdot F - A^2 \cdot F\right)}$$

0, 0, 3, 0, 0, 6:

$$\frac{C \cdot N_u \cdot \sqrt{(C + C \cdot F - 1)^2}}{\sqrt{C^2 \cdot N_u{}^2} \cdot (C + C \cdot F - 1)}$$

1, 0, 3, 0, 0, 6:

$$\frac{N_u \cdot \sqrt{\left(F - A^2 + A \cdot C - A^2 \cdot F + A \cdot C \cdot F\right)^2} \cdot \left(C \cdot A - A^2 + 1\right)}{\sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + 1\right)^2} \cdot \left(F - A^2 + A \cdot C - A^2 \cdot F + A \cdot C \cdot F\right)}$$

0, 2, 3, 0, 0, 6:

$$\frac{N_u \cdot \sqrt{(C - F + B \cdot F + C \cdot F - 1)^2} \cdot (B + C - 1)}{\sqrt{N_u{}^2 \cdot (B + C - 1)^2} \cdot (C - F + B \cdot F + C \cdot F - 1)}$$

1, 2, 3, 0, 0, 6:

$$\frac{N_u \cdot \sqrt{\left(A \cdot C - A^2 + B \cdot F - A^2 \cdot F + A \cdot C \cdot F\right)^2} \cdot \left(C \cdot A - A^2 + B\right)}{\sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + B\right)^2} \cdot \left(A \cdot C - A^2 + B \cdot F - A^2 \cdot F + A \cdot C \cdot F\right)}$$

0, 0, 0, 4, 0, 6:

$$\frac{N_u \cdot \sqrt{D^2 \cdot F^2}}{F \cdot \sqrt{D^2 \cdot N_u{}^2}}$$

1, 0, 0, 4, 0, 6:

$$\frac{N_u \cdot \sqrt{\left(A - A^2 + A \cdot F + D \cdot F - A^2 \cdot F\right)^2} \cdot \left(A - A^2 + D\right)}{\sqrt{N_u{}^2 \cdot \left(A - A^2 + D\right)^2} \cdot \left(A - A^2 + A \cdot F + D \cdot F - A^2 \cdot F\right)}$$

0, 2, 0, 4, 0, 6:

$$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot F^2}}{F \cdot \sqrt{B^2 \cdot D^2 \cdot N_u{}^2}}$$

1, 2, 0, 4, 0, 6:

$$\frac{N_u \cdot \sqrt{\left(A - A^2 + A \cdot F - A^2 \cdot F + B \cdot D \cdot F\right)^2} \cdot \left(-A^2 + A + B \cdot D\right)}{\sqrt{N_u{}^2 \cdot \left(A - A^2 + B \cdot D\right)^2} \cdot \left(A - A^2 + A \cdot F - A^2 \cdot F + B \cdot D \cdot F\right)}$$

0, 0, 3, 4, 0, 6:

$$\frac{N_u \cdot \sqrt{(C - F + C \cdot F + D \cdot F - 1)^2} \cdot (C + D - 1)}{\sqrt{N_u{}^2 \cdot (C + D - 1)^2} \cdot (C - F + C \cdot F + D \cdot F - 1)}$$

1, 0, 3, 4, 0, 6:

$$\frac{N_u \cdot \sqrt{\left(A \cdot C - A^2 + D \cdot F - A^2 \cdot F + A \cdot C \cdot F\right)^2} \cdot \left(C \cdot A - A^2 + D\right)}{\sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + D\right)^2} \cdot \left(A \cdot C - A^2 + D \cdot F - A^2 \cdot F + A \cdot C \cdot F\right)}$$

0, 2, 3, 4, 0, 6:

$$\frac{N_u \cdot \sqrt{(C - F + C \cdot F + B \cdot D \cdot F - 1)^2} \cdot (C + B \cdot D - 1)}{\sqrt{N_u{}^2 \cdot (C + B \cdot D - 1)^2} \cdot (C - F + C \cdot F + B \cdot D \cdot F - 1)}$$

1, 2, 3, 4, 0, 6:

$$\frac{N_u \cdot \sqrt{\left(A \cdot C - A^2 - A^2 \cdot F + A \cdot C \cdot F + B \cdot D \cdot F\right)^2} \cdot \left(C \cdot A - A^2 + B \cdot D\right)}{\sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + B \cdot D\right)^2} \cdot \left(A \cdot C - A^2 - A^2 \cdot F + A \cdot C \cdot F + B \cdot D \cdot F\right)}$$

0, 0, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u{}^2}}$$

1, 0, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{\left(F + A \cdot E + A \cdot F - A^2 \cdot E - A^2 \cdot F\right)^2} \cdot \left(-A^2 + A + 1\right)}{\sqrt{N_u{}^2 \cdot \left(A - A^2 + 1\right)^2} \cdot \left(F + A \cdot E + A \cdot F - A^2 \cdot E - A^2 \cdot F\right)}$$

0, 2, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{B^2 \cdot F^2}}{F \cdot \sqrt{B^2 \cdot N_u{}^2}}$$

1, 2, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{\left(A \cdot E + A \cdot F + B \cdot F - A^2 \cdot E - A^2 \cdot F\right)^2} \cdot \left(A - A^2 + B\right)}{\sqrt{N_u{}^2 \cdot \left(A - A^2 + B\right)^2} \cdot \left(A \cdot E + A \cdot F + B \cdot F - A^2 \cdot E - A^2 \cdot F\right)}$$

0, 0, 3, 0, 5, 6:

$$\frac{C \cdot N_u \cdot \sqrt{\left(C \cdot E - E + C \cdot F\right)^2}}{\sqrt{C^2 \cdot N_u{}^2} \cdot \left(C \cdot E - E + C \cdot F\right)}$$

1, 0, 3, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{\left(F - A^2 \cdot E - A^2 \cdot F + A \cdot C \cdot E + A \cdot C \cdot F\right)^2} \cdot \left(C \cdot A - A^2 + 1\right)}{\sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + 1\right)^2} \cdot \left(F - A^2 \cdot E - A^2 \cdot F + A \cdot C \cdot E + A \cdot C \cdot F\right)}$$

0, 2, 3, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{\left(B \cdot F - F - E + C \cdot E + C \cdot F\right)^2} \cdot \left(B + C - 1\right)}{\sqrt{N_u{}^2 \cdot \left(B + C - 1\right)^2} \cdot \left(B \cdot F - F - E + C \cdot E + C \cdot F\right)}$$

1, 2, 3, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{\left(B \cdot F - A^2 \cdot E - A^2 \cdot F + A \cdot C \cdot E + A \cdot C \cdot F\right)^2} \cdot \left(C \cdot A - A^2 + B\right)}{\sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + B\right)^2} \cdot \left(B \cdot F - A^2 \cdot E - A^2 \cdot F + A \cdot C \cdot E + A \cdot C \cdot F\right)}$$

0, 0, 0, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{D^2 \cdot F^2}}{F \cdot \sqrt{D^2 \cdot N_u{}^2}}$$

1, 0, 0, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{\left(A \cdot E + A \cdot F + D \cdot F - A^2 \cdot E - A^2 \cdot F\right)^2} \cdot \left(A - A^2 + D\right)}{\sqrt{N_u{}^2 \cdot \left(A - A^2 + D\right)^2} \cdot \left(A \cdot E + A \cdot F + D \cdot F - A^2 \cdot E - A^2 \cdot F\right)}$$

0, 2, 0, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot F^2}}{F \cdot \sqrt{B^2 \cdot D^2 \cdot N_u{}^2}}$$

1, 2, 0, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{\left(A \cdot E + A \cdot F - A^2 \cdot E - A^2 \cdot F + B \cdot D \cdot F\right)^2} \cdot \left(-A^2 + A + B \cdot D\right)}{\sqrt{N_u{}^2 \cdot \left(A - A^2 + B \cdot D\right)^2} \cdot \left(A \cdot E + A \cdot F - A^2 \cdot E - A^2 \cdot F + B \cdot D \cdot F\right)}$$

0, 0, 3, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{\left(C \cdot E - F - E + C \cdot F + D \cdot F\right)^2} \cdot \left(C + D - 1\right)}{\sqrt{N_u{}^2 \cdot \left(C + D - 1\right)^2} \cdot \left(C \cdot E - F - E + C \cdot F + D \cdot F\right)}$$

1, 0, 3, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{\left(D \cdot F - A^2 \cdot E - A^2 \cdot F + A \cdot C \cdot E + A \cdot C \cdot F\right)^2} \cdot \left(C \cdot A - A^2 + D\right)}{\sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + D\right)^2} \cdot \left(D \cdot F - A^2 \cdot E - A^2 \cdot F + A \cdot C \cdot E + A \cdot C \cdot F\right)}$$

0, 2, 3, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{\left(C \cdot E - F - E + C \cdot F + B \cdot D \cdot F\right)^2} \cdot \left(C + B \cdot D - 1\right)}{\sqrt{N_u{}^2 \cdot \left(C + B \cdot D - 1\right)^2} \cdot \left(C \cdot E - F - E + C \cdot F + B \cdot D \cdot F\right)}$$

1, 2, 3, 4, 5, 6:

$$\frac{N_u \cdot \sqrt{\left(A \cdot C \cdot E - A^2 \cdot F - A^2 \cdot E + A \cdot C \cdot F + B \cdot D \cdot F\right)^2} \cdot \left(A^2 - C \cdot A - B \cdot D\right)}{\sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + B \cdot D\right)^2} \cdot \left(A^2 \cdot E + A^2 \cdot F - A \cdot C \cdot E - A \cdot C \cdot F - B \cdot D \cdot F\right)}$$

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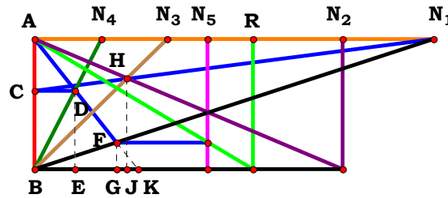


$N_1 = 3.05811$
$N_2 = 2.36074$
$N_3 = 1.01914$
$N_4 = 0.51312$
$N_5 = 1.32695$
$R = 1.67082$

Unit. $AB := 1$ Given. $N_1 := 3.05811$ $N_2 := 2.36074$ $N_3 := 1.01914$

$N_4 := .51312$ $N_5 := 1.32695$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot (C \cdot A - A^2 + B \cdot D)}{B \cdot D \cdot E} = 1.670819$$

$$Num := \frac{N_u \cdot (C \cdot A - A^2 + B \cdot D)}{\sqrt{\left[N_u \cdot (C \cdot A - A^2 + B \cdot D)\right]^2}}$$

$$Den := \frac{B \cdot D \cdot E}{\sqrt{(B \cdot D \cdot E)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot E^2} \cdot (C \cdot A - A^2 + B \cdot D)}{B \cdot D \cdot E \cdot \sqrt{N_u{}^2 \cdot (C \cdot A - A^2 + B \cdot D)^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0: $\frac{N_u \cdot (A - A^2 + 1)}{\sqrt{N_u^2 \cdot (A - A^2 + 1)^2}}$

0, 2, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2}}{\sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot (A - A^2 + B)}{B \cdot \sqrt{N_u^2 \cdot (A - A^2 + B)^2}}$

0, 0, 3, 0, 0: $\frac{C \cdot N_u}{\sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0, 0: $\frac{N_u \cdot (C \cdot A - A^2 + 1)}{\sqrt{N_u^2 \cdot (C \cdot A - A^2 + 1)^2}}$

0, 2, 3, 0, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot (B + C - 1)}{B \cdot \sqrt{N_u^2 \cdot (B + C - 1)^2}}$

1, 2, 3, 0, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot (C \cdot A - A^2 + B)}{B \cdot \sqrt{N_u^2 \cdot (C \cdot A - A^2 + B)^2}}$

0, 0, 0, 4, 0: $\frac{N_u \cdot \sqrt{D^2}}{\sqrt{D^2 \cdot N_u^2}}$

1, 0, 0, 4, 0: $\frac{N_u \cdot \sqrt{D^2} \cdot (A - A^2 + D)}{D \cdot \sqrt{N_u^2 \cdot (A - A^2 + D)^2}}$

0, 2, 0, 4, 0: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2}}$

1, 2, 0, 4, 0: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot (A - A^2 + B \cdot D)}{B \cdot D \cdot \sqrt{N_u^2 \cdot (A - A^2 + B \cdot D)^2}}$

0, 0, 3, 4, 0: $\frac{N_u \cdot \sqrt{D^2} \cdot (C + D - 1)}{D \cdot \sqrt{N_u^2 \cdot (C + D - 1)^2}}$

1, 0, 3, 4, 0: $\frac{N_u \cdot \sqrt{D^2} \cdot (C \cdot A - A^2 + D)}{D \cdot \sqrt{N_u^2 \cdot (C \cdot A - A^2 + D)^2}}$

0, 2, 3, 4, 0: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot (C + B \cdot D - 1)}{B \cdot D \cdot \sqrt{N_u^2 \cdot (C + B \cdot D - 1)^2}}$

1, 2, 3, 4, 0: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot (C \cdot A - A^2 + B \cdot D)}{B \cdot D \cdot \sqrt{N_u^2 \cdot (C \cdot A - A^2 + B \cdot D)^2}}$

0, 0, 0, 0, 5: $$\frac{N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{N_u{}^2}}$$

1, 0, 0, 0, 5: $$\frac{N_u \cdot \sqrt{E^2} \cdot \left(A - A^2 + 1\right)}{E \cdot \sqrt{N_u{}^2 \cdot \left(A - A^2 + 1\right)^2}}$$

0, 2, 0, 0, 5: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2}}{E \cdot \sqrt{B^2 \cdot N_u{}^2}}$$

1, 2, 0, 0, 5: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2} \cdot \left(A - A^2 + B\right)}{B \cdot E \cdot \sqrt{N_u{}^2 \cdot \left(A - A^2 + B\right)^2}}$$

0, 0, 3, 0, 5: $$\frac{C \cdot N_u \cdot \sqrt{E^2}}{E \cdot \sqrt{C^2 \cdot N_u{}^2}}$$

1, 0, 3, 0, 5: $$\frac{N_u \cdot \sqrt{E^2} \cdot \left(C \cdot A - A^2 + 1\right)}{E \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + 1\right)^2}}$$

0, 2, 3, 0, 5: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2} \cdot (B + C - 1)}{B \cdot E \cdot \sqrt{N_u{}^2 \cdot (B + C - 1)^2}}$$

1, 2, 3, 0, 5: $$\frac{N_u \cdot \sqrt{B^2 \cdot E^2} \cdot \left(C \cdot A - A^2 + B\right)}{B \cdot E \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + B\right)^2}}$$

0, 0, 0, 4, 5: $$\frac{N_u \cdot \sqrt{D^2 \cdot E^2}}{E \cdot \sqrt{D^2 \cdot N_u{}^2}}$$

1, 0, 0, 4, 5: $$\frac{N_u \cdot \sqrt{D^2 \cdot E^2} \cdot \left(A - A^2 + D\right)}{D \cdot E \cdot \sqrt{N_u{}^2 \cdot \left(A - A^2 + D\right)^2}}$$

0, 2, 0, 4, 5: $$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot E^2}}{E \cdot \sqrt{B^2 \cdot D^2 \cdot N_u{}^2}}$$

1, 2, 0, 4, 5: $$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot E^2} \cdot \left(A - A^2 + B \cdot D\right)}{B \cdot D \cdot E \cdot \sqrt{N_u{}^2 \cdot \left(A - A^2 + B \cdot D\right)^2}}$$

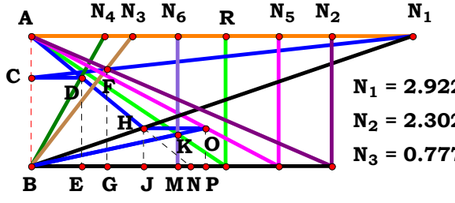
0, 0, 3, 4, 5: $$\frac{N_u \cdot \sqrt{D^2 \cdot E^2} \cdot (C + D - 1)}{D \cdot E \cdot \sqrt{N_u{}^2 \cdot (C + D - 1)^2}}$$

1, 0, 3, 4, 5: $$\frac{N_u \cdot \sqrt{D^2 \cdot E^2} \cdot \left(C \cdot A - A^2 + D\right)}{D \cdot E \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + D\right)^2}}$$

0, 2, 3, 4, 5: $$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot E^2} \cdot (C + B \cdot D - 1)}{B \cdot D \cdot E \cdot \sqrt{N_u{}^2 \cdot (C + B \cdot D - 1)^2}}$$

1, 2, 3, 4, 5: $$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot E^2} \cdot \left(C \cdot A - A^2 + B \cdot D\right)}{B \cdot D \cdot E \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + B \cdot D\right)^2}}$$

1CST7R7



$N_1 = 2.92251$ $N_2 = 2.30262$ $N_3 = 0.77700$ $N_4 = 0.56155$ $N_5 = 1.89841$ $N_6 = 1.12355$ $R = 1.49290$

Unit. $AB := 1$ **Given.** $N_1 := 2.92251$ $N_2 := 2.30262$ $N_3 := .77700$ $N_4 := .56155$ $N_5 := 1.89841$ $N_6 := 1.12355$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{B \cdot D \cdot N_u}{E \cdot A^2 - C \cdot E \cdot A + B \cdot D \cdot F} = 1.492904$$

$$Num := \frac{B \cdot D \cdot N_u}{\sqrt{(B \cdot D \cdot N_u)^2}}$$

$$Den := \frac{E \cdot A^2 - C \cdot E \cdot A + B \cdot D \cdot F}{\sqrt{(E \cdot A^2 - C \cdot E \cdot A + B \cdot D \cdot F)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot D \cdot N_u \cdot \sqrt{(E \cdot A^2 - C \cdot E \cdot A + B \cdot D \cdot F)^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2} \cdot (E \cdot A^2 - C \cdot E \cdot A + B \cdot D \cdot F)} = 0$$

For 6 variables there are 64 subsets.

0, 0, 0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{\left(A^2 - A + 1\right)^2}}{\sqrt{N_u^2} \cdot \left(A^2 - A + 1\right)}$

0, 2, 0, 0, 0, 0: $\frac{N_u \cdot \sqrt{B^2}}{\sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{\left(A^2 - A + B\right)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot \left(A^2 - A + B\right)}$

0, 0, 3, 0, 0, 0: $-\frac{N_u \cdot \sqrt{(C-2)^2}}{(C-2) \cdot \sqrt{N_u^2}}$

1, 0, 3, 0, 0, 0: $\frac{N_u \cdot \sqrt{\left(A^2 - C \cdot A + 1\right)^2}}{\sqrt{N_u^2} \cdot \left(A^2 - C \cdot A + 1\right)}$

0, 2, 3, 0, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{(B - C + 1)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot (B - C + 1)}$

1, 2, 3, 0, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{\left(A^2 - C \cdot A + B\right)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot \left(A^2 - C \cdot A + B\right)}$

0, 0, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{D^2}}{\sqrt{D^2 \cdot N_u^2}}$

1, 0, 0, 4, 0, 0: $\frac{D \cdot N_u \cdot \sqrt{\left(A^2 - A + D\right)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot \left(A^2 - A + D\right)}$

0, 2, 0, 4, 0, 0: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2}}$

1, 2, 0, 4, 0, 0: $\frac{B \cdot D \cdot N_u \cdot \sqrt{\left(A^2 - A + B \cdot D\right)^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2} \cdot \left(A^2 - A + B \cdot D\right)}$

0, 0, 3, 4, 0, 0: $\frac{D \cdot N_u \cdot \sqrt{(D - C + 1)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot (D - C + 1)}$

1, 0, 3, 4, 0, 0: $\frac{D \cdot N_u \cdot \sqrt{\left(A^2 - C \cdot A + D\right)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot \left(A^2 - C \cdot A + D\right)}$

0, 2, 3, 4, 0, 0: $\frac{B \cdot D \cdot N_u \cdot \sqrt{(B \cdot D - C + 1)^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2} \cdot (B \cdot D - C + 1)}$

1, 2, 3, 4, 0, 0: $\frac{B \cdot D \cdot N_u \cdot \sqrt{\left(A^2 - C \cdot A + B \cdot D\right)^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2} \cdot \left(A^2 - C \cdot A + B \cdot D\right)}$

0, 0, 0, 0, 5, 0: $$\frac{N_u}{\sqrt{N_u^2}}$$

1, 0, 0, 0, 5, 0: $$\frac{N_u \cdot \sqrt{\left(E \cdot A^2 - E \cdot A + 1\right)^2}}{\sqrt{N_u^2} \cdot \left(E \cdot A^2 - E \cdot A + 1\right)}$$

0, 2, 0, 0, 5, 0: $$\frac{N_u \cdot \sqrt{B^2}}{\sqrt{B^2 \cdot N_u^2}}$$

1, 2, 0, 0, 5, 0: $$\frac{B \cdot N_u \cdot \sqrt{\left(E \cdot A^2 - E \cdot A + B\right)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot \left(E \cdot A^2 - E \cdot A + B\right)}$$

0, 0, 3, 0, 5, 0: $$\frac{N_u \cdot \sqrt{(E - C \cdot E + 1)^2}}{\sqrt{N_u^2} \cdot (E - C \cdot E + 1)}$$

1, 0, 3, 0, 5, 0: $$\frac{N_u \cdot \sqrt{\left(E \cdot A^2 - C \cdot E \cdot A + 1\right)^2}}{\sqrt{N_u^2} \cdot \left(E \cdot A^2 - C \cdot E \cdot A + 1\right)}$$

0, 2, 3, 0, 5, 0: $$\frac{B \cdot N_u \cdot \sqrt{(B + E - C \cdot E)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot (B + E - C \cdot E)}$$

1, 2, 3, 0, 5, 0: $$\frac{B \cdot N_u \cdot \sqrt{\left(E \cdot A^2 - C \cdot E \cdot A + B\right)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot \left(E \cdot A^2 - C \cdot E \cdot A + B\right)}$$

0, 0, 0, 4, 5, 0: $$\frac{N_u \cdot \sqrt{D^2}}{\sqrt{D^2 \cdot N_u^2}}$$

1, 0, 0, 4, 5, 0: $$\frac{D \cdot N_u \cdot \sqrt{\left(E \cdot A^2 - E \cdot A + D\right)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot \left(E \cdot A^2 - E \cdot A + D\right)}$$

0, 2, 0, 4, 5, 0: $$\frac{N_u \cdot \sqrt{B^2 \cdot D^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2}}$$

1, 2, 0, 4, 5, 0: $$\frac{B \cdot D \cdot N_u \cdot \sqrt{\left(E \cdot A^2 - E \cdot A + B \cdot D\right)^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2} \cdot \left(E \cdot A^2 - E \cdot A + B \cdot D\right)}$$

0, 0, 3, 4, 5, 0: $$\frac{D \cdot N_u \cdot \sqrt{(D + E - C \cdot E)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot (D + E - C \cdot E)}$$

1, 0, 3, 4, 5, 0: $$\frac{D \cdot N_u \cdot \sqrt{\left(E \cdot A^2 - C \cdot E \cdot A + D\right)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot \left(E \cdot A^2 - C \cdot E \cdot A + D\right)}$$

0, 2, 3, 4, 5, 0: $$\frac{B \cdot D \cdot N_u \cdot \sqrt{(E + B \cdot D - C \cdot E)^2}}{(E + B \cdot D - C \cdot E) \cdot \sqrt{B^2 \cdot D^2 \cdot N_u^2}}$$

1, 2, 3, 4, 5, 0: $$\frac{B \cdot D \cdot N_u \cdot \sqrt{\left(E \cdot A^2 - C \cdot E \cdot A + B \cdot D\right)^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2} \cdot \left(E \cdot A^2 - C \cdot E \cdot A + B \cdot D\right)}$$

0, 0, 0, 0, 0, 6: $$\frac{N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u{}^2}}$$

1, 0, 0, 0, 0, 6: $$\frac{N_u \cdot \sqrt{\left(A^2 - A + F\right)^2}}{\sqrt{N_u{}^2} \cdot \left(A^2 - A + F\right)}$$

0, 2, 0, 0, 0, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot F^2}}{F \cdot \sqrt{B^2 \cdot N_u{}^2}}$$

1, 2, 0, 0, 0, 6: $$\frac{B \cdot N_u \cdot \sqrt{\left(A^2 - A + B \cdot F\right)^2}}{\sqrt{B^2 \cdot N_u{}^2} \cdot \left(A^2 - A + B \cdot F\right)}$$

0, 0, 3, 0, 0, 6: $$\frac{N_u \cdot \sqrt{(F - C + 1)^2}}{\sqrt{N_u{}^2} \cdot (F - C + 1)}$$

1, 0, 3, 0, 0, 6: $$\frac{N_u \cdot \sqrt{\left(A^2 - C \cdot A + F\right)^2}}{\sqrt{N_u{}^2} \cdot \left(A^2 - C \cdot A + F\right)}$$

0, 2, 3, 0, 0, 6: $$\frac{B \cdot N_u \cdot \sqrt{(B \cdot F - C + 1)^2}}{\sqrt{B^2 \cdot N_u{}^2} \cdot (B \cdot F - C + 1)}$$

1, 2, 3, 0, 0, 6: $$\frac{B \cdot N_u \cdot \sqrt{\left(A^2 - C \cdot A + B \cdot F\right)^2}}{\sqrt{B^2 \cdot N_u{}^2} \cdot \left(A^2 - C \cdot A + B \cdot F\right)}$$

0, 0, 0, 4, 0, 6: $$\frac{N_u \cdot \sqrt{D^2 \cdot F^2}}{F \cdot \sqrt{D^2 \cdot N_u{}^2}}$$

1, 0, 0, 4, 0, 6: $$\frac{D \cdot N_u \cdot \sqrt{\left(A^2 - A + D \cdot F\right)^2}}{\sqrt{D^2 \cdot N_u{}^2} \cdot \left(A^2 - A + D \cdot F\right)}$$

0, 2, 0, 4, 0, 6: $$\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot F^2}}{F \cdot \sqrt{B^2 \cdot D^2 \cdot N_u{}^2}}$$

1, 2, 0, 4, 0, 6: $$\frac{B \cdot D \cdot N_u \cdot \sqrt{\left(A^2 - A + B \cdot D \cdot F\right)^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u{}^2} \cdot \left(A^2 - A + B \cdot D \cdot F\right)}$$

0, 0, 3, 4, 0, 6: $$\frac{D \cdot N_u \cdot \sqrt{(D \cdot F - C + 1)^2}}{\sqrt{D^2 \cdot N_u{}^2} \cdot (D \cdot F - C + 1)}$$

1, 0, 3, 4, 0, 6: $$\frac{D \cdot N_u \cdot \sqrt{\left(A^2 - C \cdot A + D \cdot F\right)^2}}{\sqrt{D^2 \cdot N_u{}^2} \cdot \left(A^2 - C \cdot A + D \cdot F\right)}$$

0, 2, 3, 4, 0, 6: $$\frac{B \cdot D \cdot N_u \cdot \sqrt{(B \cdot D \cdot F - C + 1)^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u{}^2} \cdot (B \cdot D \cdot F - C + 1)}$$

1, 2, 3, 4, 0, 6: $$\frac{B \cdot D \cdot N_u \cdot \sqrt{\left(A^2 - C \cdot A + B \cdot D \cdot F\right)^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u{}^2} \cdot \left(A^2 - C \cdot A + B \cdot D \cdot F\right)}$$

0, 0, 0, 0, 5, 6: $\frac{N_u \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u^2}}$

1, 0, 0, 0, 5, 6: $\frac{N_u \cdot \sqrt{\left(E \cdot A^2 - E \cdot A + F\right)^2}}{\sqrt{N_u^2} \cdot \left(E \cdot A^2 - E \cdot A + F\right)}$

0, 2, 0, 0, 5, 6: $\frac{N_u \cdot \sqrt{B^2 \cdot F^2}}{F \cdot \sqrt{B^2 \cdot N_u^2}}$

1, 2, 0, 0, 5, 6: $\frac{B \cdot N_u \cdot \sqrt{\left(E \cdot A^2 - E \cdot A + B \cdot F\right)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot \left(E \cdot A^2 - E \cdot A + B \cdot F\right)}$

0, 0, 3, 0, 5, 6: $\frac{N_u \cdot \sqrt{(E + F - C \cdot E)^2}}{\sqrt{N_u^2} \cdot (E + F - C \cdot E)}$

1, 0, 3, 0, 5, 6: $\frac{N_u \cdot \sqrt{\left(E \cdot A^2 - C \cdot E \cdot A + F\right)^2}}{\sqrt{N_u^2} \cdot \left(E \cdot A^2 - C \cdot E \cdot A + F\right)}$

0, 2, 3, 0, 5, 6: $\frac{B \cdot N_u \cdot \sqrt{(E + B \cdot F - C \cdot E)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot (E + B \cdot F - C \cdot E)}$

1, 2, 3, 0, 5, 6: $\frac{B \cdot N_u \cdot \sqrt{\left(E \cdot A^2 - C \cdot E \cdot A + B \cdot F\right)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot \left(E \cdot A^2 - C \cdot E \cdot A + B \cdot F\right)}$

0, 0, 0, 4, 5, 6: $\frac{N_u \cdot \sqrt{D^2 \cdot F^2}}{F \cdot \sqrt{D^2 \cdot N_u^2}}$

1, 0, 0, 4, 5, 6: $\frac{D \cdot N_u \cdot \sqrt{\left(E \cdot A^2 - E \cdot A + D \cdot F\right)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot \left(E \cdot A^2 - E \cdot A + D \cdot F\right)}$

0, 2, 0, 4, 5, 6: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2 \cdot F^2}}{F \cdot \sqrt{B^2 \cdot D^2 \cdot N_u^2}}$

1, 2, 0, 4, 5, 6: $\frac{B \cdot D \cdot N_u \cdot \sqrt{\left(E \cdot A^2 - E \cdot A + B \cdot D \cdot F\right)^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2} \cdot \left(E \cdot A^2 - E \cdot A + B \cdot D \cdot F\right)}$

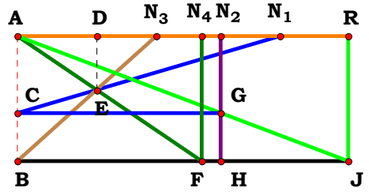
0, 0, 3, 4, 5, 6: $\frac{D \cdot N_u \cdot \sqrt{(E - C \cdot E + D \cdot F)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot (E - C \cdot E + D \cdot F)}$

1, 0, 3, 4, 5, 6: $\frac{D \cdot N_u \cdot \sqrt{\left(E \cdot A^2 - C \cdot E \cdot A + D \cdot F\right)^2}}{\sqrt{D^2 \cdot N_u^2} \cdot \left(E \cdot A^2 - C \cdot E \cdot A + D \cdot F\right)}$

0, 2, 3, 4, 5, 6: $\frac{B \cdot D \cdot N_u \cdot \sqrt{(E - C \cdot E + B \cdot D \cdot F)^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2} \cdot (E - C \cdot E + B \cdot D \cdot F)}$

1, 2, 3, 4, 5, 6: $\frac{B \cdot D \cdot N_u \cdot \sqrt{\left(E \cdot A^2 - C \cdot E \cdot A + B \cdot D \cdot F\right)^2}}{\sqrt{B^2 \cdot D^2 \cdot N_u^2} \cdot \left(E \cdot A^2 - C \cdot E \cdot A + B \cdot D \cdot F\right)}$

1CST7R8



$N_1 = 2.10101$
$N_2 = 1.62626$
$N_3 = 1.11111$
$N_4 = 1.47475$
$R = 2.64325$

Unit. $AB := 1$ **Given.** $N_1 := 2.10101$ $N_2 := 1.62626$ $N_3 := 1.11111$ $N_4 := 1.47475$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (C - A + D)}{B \cdot D} = 2.643245$$

$$Num := \frac{N_u \cdot (C - A + D)}{\sqrt{\left[N_u \cdot (C - A + D)\right]^2}}$$

$$Den := \frac{B \cdot D}{\sqrt{(B \cdot D)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot (C - A + D)}{B \cdot D \cdot \sqrt{{N_u}^2 \cdot (C - A + D)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0: $-\frac{N_u \cdot (A-2)}{\sqrt{N_u^2 \cdot (A-2)^2}}$

0, 2, 0, 0: $\frac{N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2}}$

1, 2, 0, 0: $-\frac{N_u \cdot (A-2) \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^2 \cdot (A-2)^2}}$

0, 0, 3, 0: $\frac{C \cdot N_u}{\sqrt{C^2 \cdot N_u^2}}$

1, 0, 3, 0: $\frac{N_u \cdot (C-A+1)}{\sqrt{N_u^2 \cdot (C-A+1)^2}}$

0, 2, 3, 0: $\frac{C \cdot N_u \cdot \sqrt{B^2}}{B \cdot \sqrt{C^2 \cdot N_u^2}}$

1, 2, 3, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot (C-A+1)}{B \cdot \sqrt{N_u^2 \cdot (C-A+1)^2}}$

0, 0, 0, 4: $\frac{N_u \cdot \sqrt{D^2}}{\sqrt{D^2 \cdot N_u^2}}$

1, 0, 0, 4: $\frac{N_u \cdot \sqrt{D^2} \cdot (D-A+1)}{D \cdot \sqrt{N_u^2 \cdot (D-A+1)^2}}$

0, 2, 0, 4: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2}}{B \cdot \sqrt{D^2 \cdot N_u^2}}$

1, 2, 0, 4: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot (D-A+1)}{B \cdot D \cdot \sqrt{N_u^2 \cdot (D-A+1)^2}}$

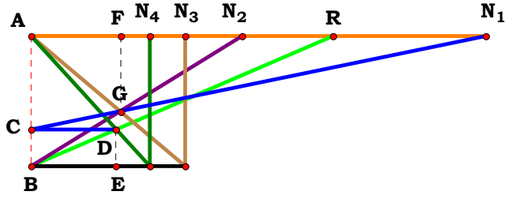
0, 0, 3, 4: $\frac{N_u \cdot \sqrt{D^2} \cdot (C+D-1)}{D \cdot \sqrt{N_u^2 \cdot (C+D-1)^2}}$

1, 0, 3, 4: $\frac{N_u \cdot \sqrt{D^2} \cdot (C-A+D)}{D \cdot \sqrt{N_u^2 \cdot (C-A+D)^2}}$

0, 2, 3, 4: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot (C+D-1)}{B \cdot D \cdot \sqrt{N_u^2 \cdot (C+D-1)^2}}$

1, 2, 3, 4: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot (C-A+D)}{B \cdot D \cdot \sqrt{N_u^2 \cdot (C-A+D)^2}}$

1CST7R9



$N_1 = 3.48429$
$N_2 = 1.61493$
$N_3 = 1.18380$
$N_4 = 0.91023$
$R = 2.31447$

Unit. $AB := 1$ **Given.** $N_1 := 3.48429$ $N_2 := 1.61493$ $N_3 := 1.18380$ $N_4 := .91023$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{C \cdot N_u}{D \cdot (B - A)} = 2.31445$$

$$Num := \frac{C \cdot N_u}{\sqrt{(C \cdot N_u)^2}}$$

$$Den := \frac{D \cdot (B - A)}{\sqrt{[D \cdot (B - A)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot N_u \cdot \sqrt{D^2 \cdot (A - B)^2}}{D \cdot \sqrt{C^2 \cdot N_u{}^2} \cdot (B - A)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0: $-\frac{N_u \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{N_u^2}}$

0, 2, 0, 0: $\frac{N_u \cdot \sqrt{(B-1)^2}}{(B-1) \cdot \sqrt{N_u^2}}$

1, 2, 0, 0: $-\frac{N_u \cdot \sqrt{(A-B)^2}}{\sqrt{N_u^2} \cdot (A-B)}$

0, 0, 3, 0: 0

1, 0, 3, 0: $-\frac{C \cdot N_u \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 0: $\frac{C \cdot N_u \cdot \sqrt{(B-1)^2}}{(B-1) \cdot \sqrt{C^2 \cdot N_u^2}}$

1, 2, 3, 0: $-\frac{C \cdot N_u \cdot \sqrt{(A-B)^2}}{\sqrt{C^2 \cdot N_u^2} \cdot (A-B)}$

0, 0, 0, 4: 0

1, 0, 0, 4: $-\frac{N_u \cdot \sqrt{D^2 \cdot (A-1)^2}}{D \cdot (A-1) \cdot \sqrt{N_u^2}}$

0, 2, 0, 4: $\frac{N_u \cdot \sqrt{D^2 \cdot (B-1)^2}}{D \cdot (B-1) \cdot \sqrt{N_u^2}}$

1, 2, 0, 4: $-\frac{N_u \cdot \sqrt{D^2 \cdot (A-B)^2}}{D \cdot \sqrt{N_u^2} \cdot (A-B)}$

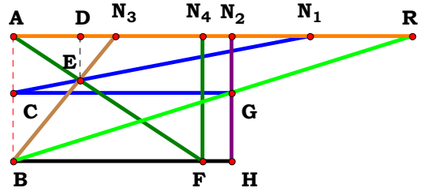
0, 0, 3, 4: 0

1, 0, 3, 4: $-\frac{C \cdot N_u \cdot \sqrt{D^2 \cdot (A-1)^2}}{D \cdot (A-1) \cdot \sqrt{C^2 \cdot N_u^2}}$

0, 2, 3, 4: $\frac{C \cdot N_u \cdot \sqrt{D^2 \cdot (B-1)^2}}{D \cdot (B-1) \cdot \sqrt{C^2 \cdot N_u^2}}$

1, 2, 3, 4: $\frac{C \cdot N_u \cdot \sqrt{D^2 \cdot (A-B)^2}}{D \cdot \sqrt{C^2 \cdot N_u^2} \cdot (B-A)}$

1CST7R10



$N_1 = 2.37374$
$N_2 = 1.74747$
$N_3 = 0.81818$
$N_4 = 1.51515$
$R = 3.18744$

Unit. $AB := 1$ **Given.** $N_1 := 2.37374$ $N_2 := 1.74747$ $N_3 := .81818$ $N_4 := 1.51515$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (C - A + D)}{B \cdot (C - A)} = 3.187426$$

$$Num := \frac{N_u \cdot (C - A + D)}{\sqrt{\left[N_u \cdot (C - A + D)\right]^2}}$$

$$Den := \frac{B \cdot (C - A)}{\sqrt{\left[B \cdot (C - A)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot (A - C)^2} \cdot (A - C - D)}{B \cdot \sqrt{N_u{}^2 \cdot (C - A + D)^2} \cdot (A - C)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0: $$\frac{N_u \cdot (A-2) \cdot \sqrt{(A-1)^2}}{(A-1) \cdot \sqrt{N_u^2 \cdot (A-2)^2}}$$

0, 2, 0, 0: 0

1, 2, 0, 0: $$\frac{N_u \cdot (A-2) \cdot \sqrt{B^2 \cdot (A-1)^2}}{B \cdot (A-1) \cdot \sqrt{N_u^2 \cdot (A-2)^2}}$$

0, 0, 3, 0: $$\frac{C \cdot N_u \cdot \sqrt{(C-1)^2}}{(C-1) \cdot \sqrt{C^2 \cdot N_u^2}}$$

1, 0, 3, 0: $$-\frac{N_u \cdot \sqrt{(A-C)^2} \cdot (C-A+1)}{\sqrt{N_u^2 \cdot (C-A+1)^2} \cdot (A-C)}$$

0, 2, 3, 0: $$\frac{C \cdot N_u \cdot \sqrt{B^2 \cdot (C-1)^2}}{B \cdot (C-1) \cdot \sqrt{C^2 \cdot N_u^2}}$$

1, 2, 3, 0: $$-\frac{N_u \cdot \sqrt{B^2 \cdot (A-C)^2} \cdot (C-A+1)}{B \cdot \sqrt{N_u^2 \cdot (C-A+1)^2} \cdot (A-C)}$$

0, 0, 0, 4: 0

1, 0, 0, 4: $$-\frac{N_u \cdot \sqrt{(A-1)^2} \cdot (D-A+1)}{(A-1) \cdot \sqrt{N_u^2 \cdot (D-A+1)^2}}$$

0, 2, 0, 4: 0

1, 2, 0, 4: $$-\frac{N_u \cdot \sqrt{B^2 \cdot (A-1)^2} \cdot (D-A+1)}{B \cdot (A-1) \cdot \sqrt{N_u^2 \cdot (D-A+1)^2}}$$

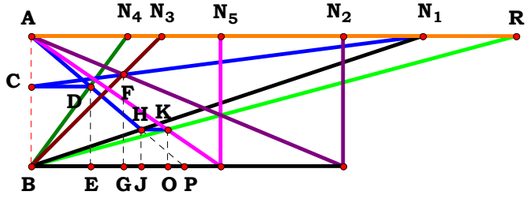
0, 0, 3, 4: $$\frac{N_u \cdot \sqrt{(C-1)^2} \cdot (C+D-1)}{\sqrt{N_u^2 \cdot (C+D-1)^2} \cdot (C-1)}$$

1, 0, 3, 4: $$-\frac{N_u \cdot \sqrt{(A-C)^2} \cdot (C-A+D)}{\sqrt{N_u^2 \cdot (C-A+D)^2} \cdot (A-C)}$$

0, 2, 3, 4: $$\frac{N_u \cdot \sqrt{B^2 \cdot (C-1)^2} \cdot (C+D-1)}{B \cdot \sqrt{N_u^2 \cdot (C+D-1)^2} \cdot (C-1)}$$

1, 2, 3, 4: $$\frac{N_u \cdot \sqrt{B^2 \cdot (A-C)^2} \cdot (A-C-D)}{B \cdot \sqrt{N_u^2 \cdot (C-A+D)^2} \cdot (A-C)}$$

1CST7R11



$N_1 = 3.00000$
$N_2 = 2.38980$
$N_3 = 0.99977$
$N_4 = 0.73589$
$N_5 = 1.45287$
$R = 3.71634$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 2.38980$ $N_3 := .99977$

$N_4 := .73589$ $N_5 := 1.45287$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot D \cdot N_u}{E \cdot [A \cdot (C - A)]} = 3.716336$$

$$Num := \frac{B \cdot D \cdot N_u}{\sqrt{(B \cdot D \cdot N_u)^2}}$$

$$Den := \frac{E \cdot [A \cdot (C - A)]}{\sqrt{[E \cdot [A \cdot (C - A)]]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot D \cdot N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A - C)^2}}{A \cdot E \cdot (C - A) \cdot \sqrt{B^2 \cdot D^2 \cdot N_u^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: 0

0, 0, 0, 4, 0: 0

0, 0, 0, 0, 5: 0

0, 0, 0, 4, 5: 0

1, 0, 0, 0, 0: $-\frac{N_u \cdot \sqrt{A^2 \cdot (A-1)^2}}{A \cdot (A-1) \cdot \sqrt{N_u{}^2}}$

1, 0, 0, 4, 0: $-\frac{D \cdot N_u \cdot \sqrt{A^2 \cdot (A-1)^2}}{A \cdot (A-1) \cdot \sqrt{D^2 \cdot N_u{}^2}}$

1, 0, 0, 0, 5: $-\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-1)^2}}{A \cdot E \cdot (A-1) \cdot \sqrt{N_u{}^2}}$

1, 0, 0, 4, 5: $-\frac{D \cdot N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-1)^2}}{A \cdot E \cdot (A-1) \cdot \sqrt{D^2 \cdot N_u{}^2}}$

0, 2, 0, 0, 0: 0

0, 2, 0, 4, 0: 0

0, 2, 0, 0, 5: 0

0, 2, 0, 4, 5: 0

1, 2, 0, 0, 0: $-\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot (A-1)^2}}{A \cdot (A-1) \cdot \sqrt{B^2 \cdot N_u{}^2}}$

1, 2, 0, 4, 0: $-\frac{B \cdot D \cdot N_u \cdot \sqrt{A^2 \cdot (A-1)^2}}{A \cdot (A-1) \cdot \sqrt{B^2 \cdot D^2 \cdot N_u{}^2}}$

1, 2, 0, 0, 5: $\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-1)^2}}{A \cdot E \cdot (A-1) \cdot \sqrt{B^2 \cdot N_u{}^2}}$

1, 2, 0, 4, 5: $-\frac{B \cdot D \cdot N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-1)^2}}{A \cdot E \cdot (A-1) \cdot \sqrt{B^2 \cdot D^2 \cdot N_u{}^2}}$

0, 0, 3, 0, 0: $\frac{N_u \cdot \sqrt{(C-1)^2}}{(C-1) \cdot \sqrt{N_u{}^2}}$

0, 0, 3, 4, 0: $\frac{D \cdot N_u \cdot \sqrt{(C-1)^2}}{(C-1) \cdot \sqrt{D^2 \cdot N_u{}^2}}$

0, 0, 3, 0, 5: $\frac{N_u \cdot \sqrt{E^2 \cdot (C-1)^2}}{E \cdot (C-1) \cdot \sqrt{N_u{}^2}}$

0, 0, 3, 4, 5: $\frac{D \cdot N_u \cdot \sqrt{E^2 \cdot (C-1)^2}}{E \cdot (C-1) \cdot \sqrt{D^2 \cdot N_u{}^2}}$

1, 0, 3, 0, 0: $-\frac{N_u \cdot \sqrt{A^2 \cdot (A-C)^2}}{A \cdot \sqrt{N_u{}^2} \cdot (A-C)}$

1, 0, 3, 4, 0: $-\frac{D \cdot N_u \cdot \sqrt{A^2 \cdot (A-C)^2}}{A \cdot \sqrt{D^2 \cdot N_u{}^2} \cdot (A-C)}$

1, 0, 3, 0, 5: $-\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-C)^2}}{A \cdot E \cdot \sqrt{N_u{}^2} \cdot (A-C)}$

1, 0, 3, 4, 5: $-\frac{D \cdot N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-C)^2}}{A \cdot E \cdot \sqrt{D^2 \cdot N_u{}^2} \cdot (A-C)}$

0, 2, 3, 0, 0: $\frac{B \cdot N_u \cdot \sqrt{(C-1)^2}}{(C-1) \cdot \sqrt{B^2 \cdot N_u{}^2}}$

0, 2, 3, 4, 0: $\frac{B \cdot D \cdot N_u \cdot \sqrt{(C-1)^2}}{(C-1) \cdot \sqrt{B^2 \cdot D^2 \cdot N_u{}^2}}$

0, 2, 3, 0, 5: $\frac{B \cdot N_u \cdot \sqrt{E^2 \cdot (C-1)^2}}{E \cdot (C-1) \cdot \sqrt{B^2 \cdot N_u{}^2}}$

0, 2, 3, 4, 5: $\frac{B \cdot D \cdot N_u \cdot \sqrt{E^2 \cdot (C-1)^2}}{E \cdot (C-1) \cdot \sqrt{B^2 \cdot D^2 \cdot N_u{}^2}}$

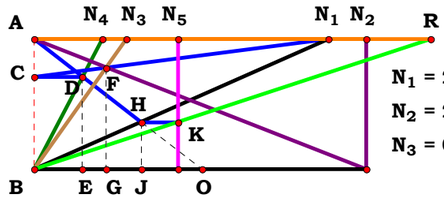
1, 2, 3, 0, 0: $-\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot (A-C)^2}}{A \cdot \sqrt{B^2 \cdot N_u{}^2} \cdot (A-C)}$

1, 2, 3, 4, 0: $-\frac{B \cdot D \cdot N_u \cdot \sqrt{A^2 \cdot (A-C)^2}}{A \cdot (A-C) \cdot \sqrt{B^2 \cdot D^2 \cdot N_u{}^2}}$

1, 2, 3, 0, 5: $-\frac{B \cdot N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-C)^2}}{A \cdot E \cdot \sqrt{B^2 \cdot N_u{}^2} \cdot (A-C)}$

1, 2, 3, 4, 5: $\frac{B \cdot D \cdot N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-C)^2}}{A \cdot E \cdot (C-A) \cdot \sqrt{B^2 \cdot D^2 \cdot N_u{}^2}}$

1CST7R12



$N_1 = 2.25419$ $N_4 = 0.52280$

$N_2 = 2.54477$ $N_5 = 1.10418$

$N_3 = 0.70920$ $R = 3.04005$

Unit. $AB := 1$ Given. $N_1 := 2.25419$ $N_2 := 2.54477$ $N_3 := .70920$

$N_4 := .52280$ $N_5 := 1.10418$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - C \cdot A - B \cdot D\right)}{A \cdot E \cdot (A - C)} = 3.040066$$

$$Num := \frac{N_u \cdot \left(A^2 - C \cdot A - B \cdot D\right)}{\sqrt{\left[N_u \cdot \left(A^2 - C \cdot A - B \cdot D\right)\right]^2}}$$

$$Den := \frac{A \cdot E \cdot (A - C)}{\sqrt{[A \cdot E \cdot (A - C)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A - C)^2} \cdot \left(A^2 - C \cdot A - B \cdot D\right)}{A \cdot E \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + B \cdot D\right)^2} \cdot (A - C)} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: 0

1, 0, 0, 0, 0: $$-\frac{N_u \cdot \sqrt{A^2 \cdot (A-1)^2} \cdot \left(A - A^2 + 1\right)}{A \cdot \sqrt{N_u{}^2 \cdot \left(A - A^2 + 1\right)^2} \cdot (A-1)}$$

0, 2, 0, 0, 0: 0

1, 2, 0, 0, 0: $$-\frac{N_u \cdot \sqrt{A^2 \cdot (A-1)^2} \cdot \left(A - A^2 + B\right)}{A \cdot (A-1) \cdot \sqrt{N_u{}^2 \cdot \left(A - A^2 + B\right)^2}}$$

0, 0, 3, 0, 0: $$\frac{C \cdot N_u \cdot \sqrt{(C-1)^2}}{(C-1) \cdot \sqrt{C^2 \cdot N_u{}^2}}$$

1, 0, 3, 0, 0: $$-\frac{N_u \cdot \sqrt{A^2 \cdot (A-C)^2} \cdot \left(C \cdot A - A^2 + 1\right)}{A \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + 1\right)^2} \cdot (A-C)}$$

0, 2, 3, 0, 0: $$\frac{N_u \cdot \sqrt{(C-1)^2} \cdot (B + C - 1)}{\sqrt{N_u{}^2 \cdot (B + C - 1)^2} \cdot (C-1)}$$

1, 2, 3, 0, 0: $$-\frac{N_u \cdot \sqrt{A^2 \cdot (A-C)^2} \cdot \left(C \cdot A - A^2 + B\right)}{A \cdot (A-C) \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + B\right)^2}}$$

0, 0, 0, 4, 0: 0

1, 0, 0, 4, 0: $$-\frac{N_u \cdot \sqrt{A^2 \cdot (A-1)^2} \cdot \left(A - A^2 + D\right)}{A \cdot (A-1) \cdot \sqrt{N_u{}^2 \cdot \left(A - A^2 + D\right)^2}}$$

0, 2, 0, 4, 0: 0

1, 2, 0, 4, 0: $$-\frac{N_u \cdot \sqrt{A^2 \cdot (A-1)^2} \cdot \left(A - A^2 + B \cdot D\right)}{A \cdot (A-1) \cdot \sqrt{N_u{}^2 \cdot \left(A - A^2 + B \cdot D\right)^2}}$$

0, 0, 3, 4, 0: $$\frac{N_u \cdot \sqrt{(C-1)^2} \cdot (C + D - 1)}{\sqrt{N_u{}^2 \cdot (C + D - 1)^2} \cdot (C-1)}$$

1, 0, 3, 4, 0: $$-\frac{N_u \cdot \sqrt{A^2 \cdot (A-C)^2} \cdot \left(C \cdot A - A^2 + D\right)}{A \cdot (A-C) \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + D\right)^2}}$$

0, 2, 3, 4, 0: $$\frac{N_u \cdot \sqrt{(C-1)^2} \cdot (C + B \cdot D - 1)}{(C-1) \cdot \sqrt{N_u{}^2 \cdot (C + B \cdot D - 1)^2}}$$

1, 2, 3, 4, 0: $$-\frac{N_u \cdot \sqrt{A^2 \cdot (A-C)^2} \cdot \left(C \cdot A - A^2 + B \cdot D\right)}{A \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + B \cdot D\right)^2} \cdot (A-C)}$$

0, 0, 0, 0, 5: 0

1, 0, 0, 0, 5: $$-\frac{N_u \cdot \left(A - A^2 + 1\right) \cdot \sqrt{A^2 \cdot E^2 \cdot (A-1)^2}}{A \cdot E \cdot \sqrt{N_u{}^2 \cdot \left(A - A^2 + 1\right)^2} \cdot (A-1)}$$

0, 2, 0, 0, 5: 0

1, 2, 0, 0, 5: $$-\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-1)^2} \cdot \left(A - A^2 + B\right)}{A \cdot E \cdot (A-1) \cdot \sqrt{N_u{}^2 \cdot \left(A - A^2 + B\right)^2}}$$

0, 0, 3, 0, 5: $$\frac{C \cdot N_u \cdot \sqrt{E^2 \cdot (C-1)^2}}{E \cdot (C-1) \cdot \sqrt{C^2 \cdot N_u{}^2}}$$

1, 0, 3, 0, 5: $$-\frac{N_u \cdot \left(C \cdot A - A^2 + 1\right) \cdot \sqrt{A^2 \cdot E^2 \cdot (A-C)^2}}{A \cdot E \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + 1\right)^2} \cdot (A-C)}$$

0, 2, 3, 0, 5: $$\frac{N_u \cdot \sqrt{E^2 \cdot (C-1)^2} \cdot (B + C - 1)}{E \cdot \sqrt{N_u{}^2 \cdot (B + C - 1)^2} \cdot (C-1)}$$

1, 2, 3, 0, 5: $$-\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-C)^2} \cdot \left(C \cdot A - A^2 + B\right)}{A \cdot E \cdot (A-C) \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + B\right)^2}}$$

0, 0, 0, 4, 5: 0

1, 0, 0, 4, 5: $$-\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-1)^2} \cdot \left(A - A^2 + D\right)}{A \cdot E \cdot (A-1) \cdot \sqrt{N_u{}^2 \cdot \left(A - A^2 + D\right)^2}}$$

0, 2, 0, 4, 5: 0

1, 2, 0, 4, 5: $$-\frac{N_u \cdot \left(A - A^2 + B \cdot D\right) \cdot \sqrt{A^2 \cdot E^2 \cdot (A-1)^2}}{A \cdot E \cdot (A-1) \cdot \sqrt{N_u{}^2 \cdot \left(A - A^2 + B \cdot D\right)^2}}$$

0, 0, 3, 4, 5: $$\frac{N_u \cdot \sqrt{E^2 \cdot (C-1)^2} \cdot (C + D - 1)}{E \cdot \sqrt{N_u{}^2 \cdot (C + D - 1)^2} \cdot (C-1)}$$

1, 0, 3, 4, 5: $$-\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-C)^2} \cdot \left(C \cdot A - A^2 + D\right)}{A \cdot E \cdot (A-C) \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + D\right)^2}}$$

0, 2, 3, 4, 5: $$\frac{N_u \cdot \sqrt{E^2 \cdot (C-1)^2} \cdot (C + B \cdot D - 1)}{E \cdot (C-1) \cdot \sqrt{N_u{}^2 \cdot (C + B \cdot D - 1)^2}}$$

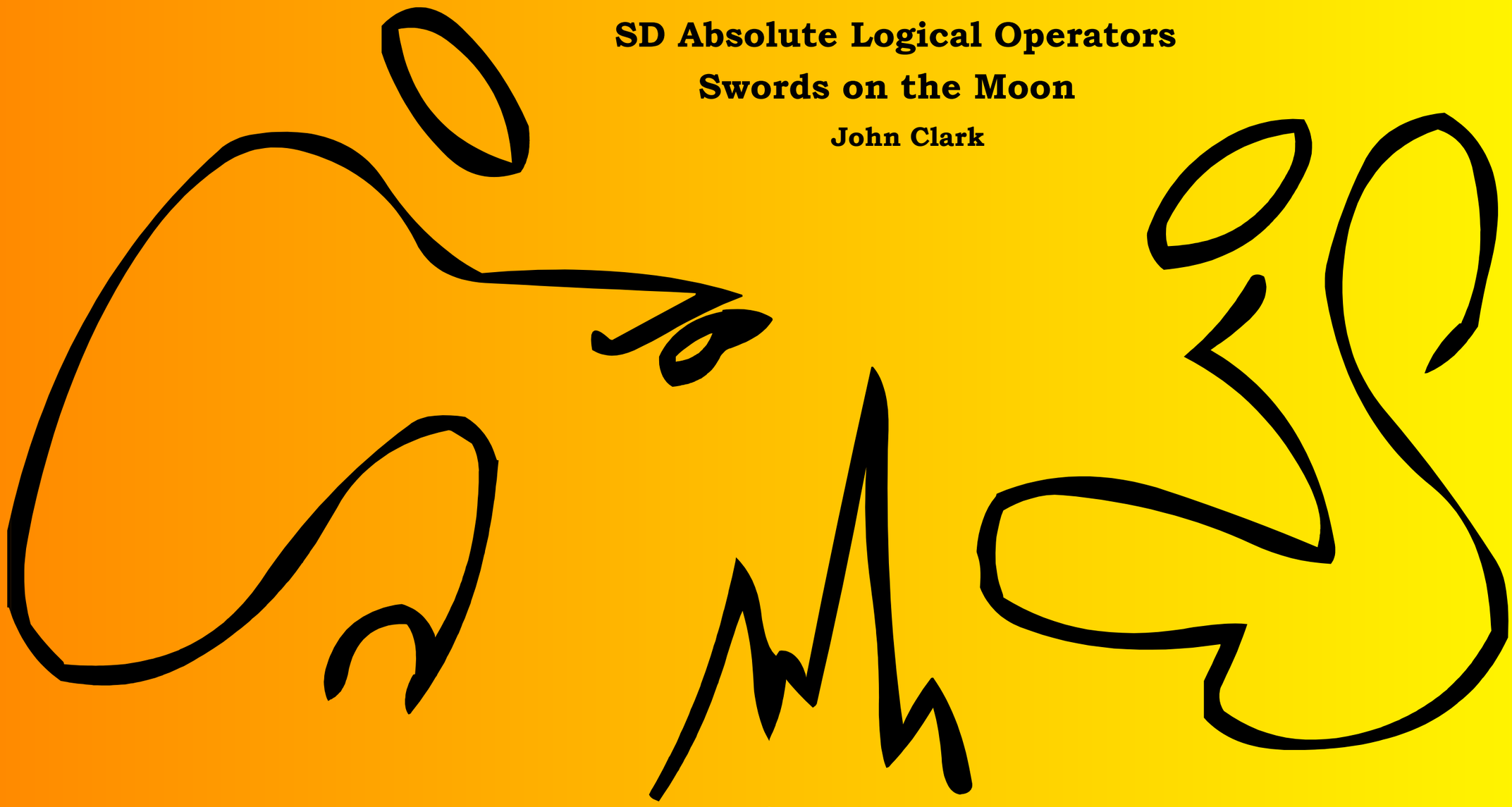
1, 2, 3, 4, 5: $$\frac{N_u \cdot \sqrt{A^2 \cdot E^2 \cdot (A-C)^2} \cdot \left(A^2 - C \cdot A - B \cdot D\right)}{A \cdot E \cdot \sqrt{N_u{}^2 \cdot \left(C \cdot A - A^2 + B \cdot D\right)^2} \cdot (A-C)}$$

Basic Analog Grammar

SD Absolute Logical Operators

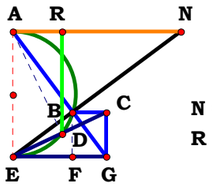
Swords on the Moon

John Clark



John 312

2SMT1R0



N = 1.34343
R = 0.38959

Unit. $AE := 1$ Given. $N := 1.34343$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(A^2 + N_u{}^2\right)}{A^4 + 3 \cdot A^2 \cdot N_u{}^2 + N_u{}^4} = 0.389595$$

$$Num := \frac{A \cdot N_u \cdot \left(A^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(A^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{A^4 + 3 \cdot A^2 \cdot N_u{}^2 + N_u{}^4}{\sqrt{\left(A^4 + 3 \cdot A^2 \cdot N_u{}^2 + N_u{}^4\right)^2}}$$

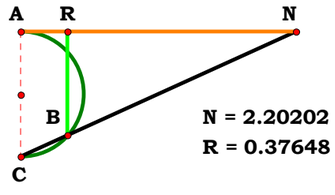
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{\left(A^4 + 3 \cdot A^2 \cdot N_u{}^2 + N_u{}^4\right)^2}}{\left(A^4 + 3 \cdot A^2 \cdot N_u{}^2 + N_u{}^4\right) \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(A^2 + N_u{}^2\right)^2}} = 0$$

2SMT1R1



Unit. $AC := 1$ Given. $N := 2.20202$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A \cdot N_u}{A^2 + N_u{}^2} = 0.376485$$

$$Num := \frac{A \cdot N_u}{\sqrt{(A \cdot N_u)^2}}$$

$$Den := \frac{A^2 + N_u{}^2}{\sqrt{\left(A^2 + N_u{}^2\right)^2}}$$

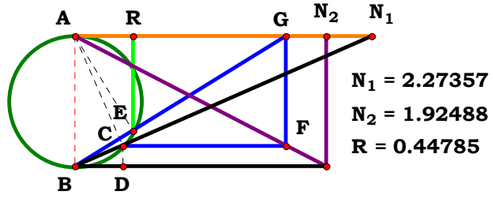
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{\left(A^2 + N_u{}^2\right)^2}}{\sqrt{A^2 \cdot N_u{}^2} \cdot \left(A^2 + N_u{}^2\right)} = 0$$

2SMT1R2



Unit. $AB := 1$ Given. $N_1 := 2.27357$ $N_2 := 1.92488$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{B \cdot {N_u}^3 \cdot \left(A^2 + {N_u}^2\right)}{A^4 \cdot B^2 + 2 \cdot A^2 \cdot B^2 \cdot {N_u}^2 + B^2 \cdot {N_u}^4 + {N_u}^6} = 0.447853$$

$$Num := \frac{B \cdot {N_u}^3 \cdot \left(A^2 + {N_u}^2\right)}{\sqrt{\left[B \cdot {N_u}^3 \cdot \left(A^2 + {N_u}^2\right)\right]^2}}$$

$$Den := \frac{A^4 \cdot B^2 + 2 \cdot A^2 \cdot B^2 \cdot {N_u}^2 + B^2 \cdot {N_u}^4 + {N_u}^6}{\sqrt{\left(A^4 \cdot B^2 + 2 \cdot A^2 \cdot B^2 \cdot {N_u}^2 + B^2 \cdot {N_u}^4 + {N_u}^6\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^4 \cdot B^2 + 2 \cdot A^2 \cdot B^2 \cdot {N_u}^2 + B^2 \cdot {N_u}^4 + {N_u}^6}{\sqrt{\left(A^4 \cdot B^2 + 2 \cdot A^2 \cdot B^2 \cdot {N_u}^2 + B^2 \cdot {N_u}^4 + {N_u}^6\right)^2}} = 0$$

For 2 variables there are 4 subsets.

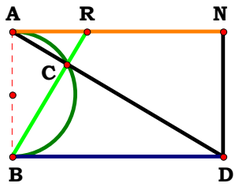
0, 0:
$$\frac{N_u^6 + N_u^4 + 2 \cdot N_u^2 + 1}{\sqrt{\left(N_u^6 + N_u^4 + 2 \cdot N_u^2 + 1\right)^2}}$$

1, 0:
$$\frac{A^4 + 2 \cdot A^2 \cdot N_u^2 + N_u^6 + N_u^4}{\sqrt{\left(A^4 + 2 \cdot A^2 \cdot N_u^2 + N_u^6 + N_u^4\right)^2}}$$

0, 2:
$$\frac{B^2 \cdot N_u^4 + 2 \cdot B^2 \cdot N_u^2 + B^2 + N_u^6}{\sqrt{\left(B^2 \cdot N_u^4 + 2 \cdot B^2 \cdot N_u^2 + B^2 + N_u^6\right)^2}}$$

1, 2:
$$\frac{A^4 \cdot B^2 + 2 \cdot A^2 \cdot B^2 \cdot N_u^2 + B^2 \cdot N_u^4 + N_u^6}{\sqrt{\left(A^4 \cdot B^2 + 2 \cdot A^2 \cdot B^2 \cdot N_u^2 + B^2 \cdot N_u^4 + N_u^6\right)^2}}$$

2SMT1R3



N = 1.68687
R = 0.59281

Unit. $AB := 1$ Given. $N := 1.68687$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

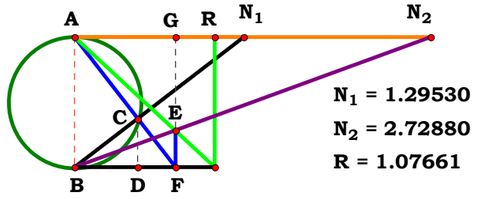
$\frac{A}{N_u} = 0.592814$ $Num := \frac{A}{\sqrt{A^2}}$ $Den := \frac{N_u}{\sqrt{N_u{}^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{A \cdot \sqrt{N_u{}^2}}{N_u \cdot \sqrt{A^2}} = 0$

2SMT1R4



$N_1 = 1.29530$
$N_2 = 2.72880$
$R = 1.07661$

Unit. $AB := 1$ Given. $N_1 := 1.29530$ $N_2 := 2.72880$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A \cdot N_u}{N_u^2 - A \cdot B} = 1.076613$$

$$Num := \frac{A \cdot N_u}{\sqrt{(A \cdot N_u)^2}}$$

$$Den := \frac{N_u^2 - A \cdot B}{\sqrt{(N_u^2 - A \cdot B)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{(N_u^2 - A \cdot B)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot (N_u^2 - A \cdot B)} = 0$$

For 2 variables there are 4 subsets.

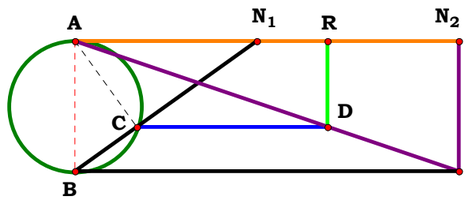
0, 0: $$\frac{N_u \cdot \sqrt{\left(N_u^{\,2} - 1\right)^2}}{\sqrt{N_u^{\,2}} \cdot \left(N_u^{\,2} - 1\right)}$$

1, 0: $$-\frac{A \cdot N_u \cdot \sqrt{\left(A - N_u^{\,2}\right)^2}}{\left(A - N_u^{\,2}\right) \cdot \sqrt{A^2 \cdot N_u^{\,2}}}$$

0, 2: $$-\frac{N_u \cdot \sqrt{\left(B - N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,2}} \cdot \left(B - N_u^{\,2}\right)}$$

1, 2: $$\frac{A \cdot N_u \cdot \sqrt{\left(N_u^{\,2} - A \cdot B\right)^2}}{\sqrt{A^2 \cdot N_u^{\,2}} \cdot \left(N_u^{\,2} - A \cdot B\right)}$$

2SMT1R5



$N_1 = 1.39216$

$N_2 = 2.94189$

$R = 1.94060$

Unit. $AB := 1$ **Given.** $N_1 := 1.39216$ $N_2 := 2.94189$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u^3}{B\cdot\left(A^2+N_u^2\right)} = 1.940603$$

$$Num := \frac{N_u^3}{\sqrt{\left(N_u^3\right)^2}}$$

$$Den := \frac{B\cdot\left(A^2+N_u^2\right)}{\sqrt{\left[B\cdot\left(A^2+N_u^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^3\cdot\sqrt{B^2\cdot\left(A^2+N_u^2\right)^2}}{B\cdot\sqrt{N_u^6}\cdot\left(A^2+N_u^2\right)} = 0$$

For 2 variables there are 4 subsets.

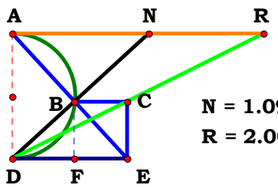
0, 0: $$\frac{N_u^{3} \cdot \sqrt{\left(N_u^{2}+1\right)^{2}}}{\sqrt{N_u^{6}} \cdot \left(N_u^{2}+1\right)}$$

1, 0: $$\frac{N_u^{3} \cdot \sqrt{\left(A^{2}+N_u^{2}\right)^{2}}}{\sqrt{N_u^{6}} \cdot \left(A^{2}+N_u^{2}\right)}$$

0, 2: $$\frac{N_u^{3} \cdot \sqrt{B^{2} \cdot \left(N_u^{2}+1\right)^{2}}}{B \cdot \sqrt{N_u^{6}} \cdot \left(N_u^{2}+1\right)}$$

1, 2: $$\frac{N_u^{3} \cdot \sqrt{B^{2} \cdot \left(A^{2}+N_u^{2}\right)^{2}}}{B \cdot \sqrt{N_u^{6}} \cdot \left(A^{2}+N_u^{2}\right)}$$

2SMT1R6



N = 1.09091
R = 2.00758

Unit. $AD := 1$ **Given.** $N := 1.09091$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

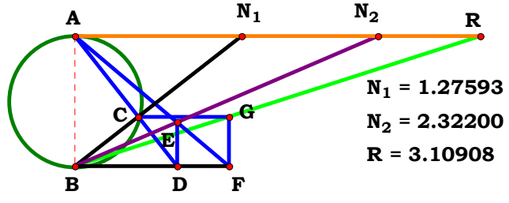
$\frac{A^2 + N_u^2}{A \cdot N_u} = 2.007576$ $Num := \frac{A^2 + N_u^2}{\sqrt{\left(A^2 + N_u^2\right)^2}}$ $Den := \frac{A \cdot N_u}{\sqrt{\left(A \cdot N_u\right)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{\sqrt{A^2 \cdot N_u^2} \cdot \left(A^2 + N_u^2\right)}{A \cdot N_u \cdot \sqrt{\left(A^2 + N_u^2\right)^2}} = 0$

2SMT1R7



Unit. $AB := 1$ Given. $N_1 := 1.27593$ $N_2 := 2.32200$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + {N_u}^2\right)}{A \cdot \left({N_u}^2 - A \cdot B\right)} = 3.109074$$

$$Num := \frac{N_u \cdot \left(A^2 + {N_u}^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 + {N_u}^2\right)\right]^2}}$$

$$Den := \frac{A \cdot \left({N_u}^2 - A \cdot B\right)}{\sqrt{\left[A \cdot \left({N_u}^2 - A \cdot B\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^2 \cdot \left({N_u}^2 - A \cdot B\right)^2} \cdot \left(A^2 + {N_u}^2\right)}{A \cdot \sqrt{{N_u}^2 \cdot \left(A^2 + {N_u}^2\right)^2} \cdot \left({N_u}^2 - A \cdot B\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2}-1\right)^2}\cdot\left(N_u^{\,2}+1\right)}{\sqrt{N_u^{\,2}\cdot\left(N_u^{\,2}+1\right)^2}\cdot\left(N_u^{\,2}-1\right)}$$

1, 0:

$$-\frac{N_u \cdot \sqrt{A^2\cdot\left(A-N_u^{\,2}\right)^2}\cdot\left(A^2+N_u^{\,2}\right)}{A\cdot\sqrt{N_u^{\,2}\cdot\left(A^2+N_u^{\,2}\right)^2}\cdot\left(A-N_u^{\,2}\right)}$$

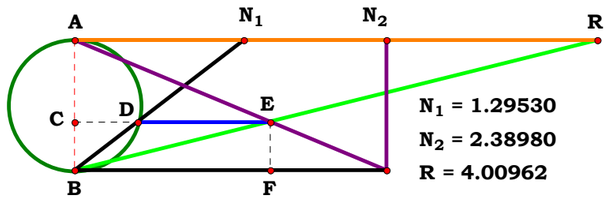
0, 2:

$$-\frac{N_u\cdot\left(N_u^{\,2}+1\right)\cdot\sqrt{\left(B-N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,2}\cdot\left(N_u^{\,2}+1\right)^2}\cdot\left(B-N_u^{\,2}\right)}$$

1, 2:

$$\frac{N_u \cdot \sqrt{A^2\cdot\left(N_u^{\,2}-A\cdot B\right)^2}\cdot\left(A^2+N_u^{\,2}\right)}{A\cdot\sqrt{N_u^{\,2}\cdot\left(A^2+N_u^{\,2}\right)^2}\cdot\left(N_u^{\,2}-A\cdot B\right)}$$

2SMT1R8



Unit. $AB := 1$ **Given.** $N_1 := 1.29530$ $N_2 := 2.38980$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$\frac{N_u^3}{A^2 \cdot B} = 4.009611$ $Num := \frac{N_u^3}{\sqrt{(N_u^3)^2}}$ $Den := \frac{A^2 \cdot B}{\sqrt{(A^2 \cdot B)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{N_u^3 \cdot \sqrt{A^4 \cdot B^2}}{A^2 \cdot B \cdot \sqrt{N_u^6}} = 0$

For 2 variables there are 4 subsets.

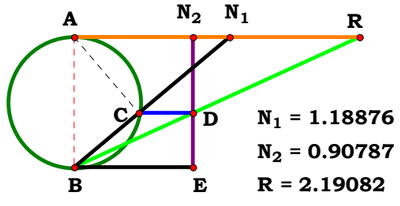
0, 0: $\frac{N_u^{3}}{\sqrt{N_u^{6}}}$

1, 0: $\frac{N_u^{3}\cdot\sqrt{A^{4}}}{A^{2}\cdot\sqrt{N_u^{6}}}$

0, 2: $\frac{N_u^{3}\cdot\sqrt{B^{2}}}{B\cdot\sqrt{N_u^{6}}}$

1, 2: $\frac{N_u^{3}\cdot\sqrt{A^{4}\cdot B^{2}}}{A^{2}\cdot B\cdot\sqrt{N_u^{6}}}$

2SMT1R9



Unit. $AB := 1$ Given. $N_1 := 1.18876$ $N_2 := .90787$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot B} = 2.190827$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u^2\right)\right]^2}}$$

$$Den := \frac{A^2 \cdot B}{\sqrt{\left(A^2 \cdot B\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^4 \cdot B^2} \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot B \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}} = 0$$

For 2 variables there are 4 subsets.

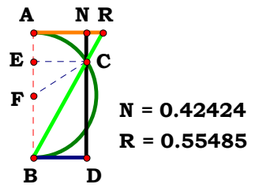
0, 0: $$\frac{N_u \cdot \left(N_u^{\,2} + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} + 1\right)^2}}$$

1, 0: $$\frac{N_u \cdot \sqrt{A^4} \cdot \left(A^2 + N_u^{\,2}\right)}{A^2 \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2}\right)^2}}$$

0, 2: $$\frac{N_u \cdot \sqrt{B^2} \cdot \left(N_u^{\,2} + 1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} + 1\right)^2}}$$

1, 2: $$\frac{N_u \cdot \sqrt{A^4 \cdot B^2} \cdot \left(A^2 + N_u^{\,2}\right)}{A^2 \cdot B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2}\right)^2}}$$

2SMT1R10



Unit. $AB := 1$ **Given.** $N := .42424$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{2 \cdot N_u}{A + \sqrt{A^2 - 4 \cdot N_u{}^2}} = 0.554842$$

$$Num := \frac{2 \cdot N_u}{\sqrt{(2 \cdot N_u)^2}}$$

$$Den := \frac{A + \sqrt{A^2 - 4 \cdot N_u{}^2}}{\sqrt{\left(A + \sqrt{A^2 - 4 \cdot N_u{}^2}\right)^2}}$$

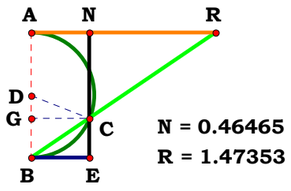
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left(A + \sqrt{A^2 - 4 \cdot N_u{}^2}\right)^2}}{\left(A + \sqrt{A^2 - 4 \cdot N_u{}^2}\right) \cdot \sqrt{N_u{}^2}} = 0$$

2SMT1R11



N = 0.46465
R = 1.47353

Unit. $AB := 1$ **Given.** $N := .46465$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{2 \cdot N_u}{A - \sqrt{A^2 - 4 \cdot N_u^2}} = 1.473502$$

$$Num := \frac{2 \cdot N_u}{\sqrt{(2 \cdot N_u)^2}}$$

$$Den := \frac{A - \sqrt{A^2 - 4 \cdot N_u^2}}{\sqrt{\left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right)^2}}$$

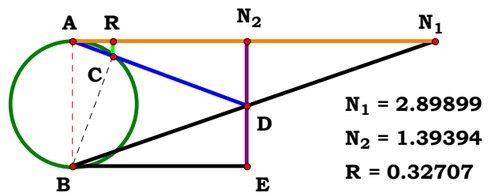
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right)^2}}{\sqrt{N_u^2} \cdot \left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right)} = 0$$

2SMT2R0



Unit. $AB := 1$ Given. $N_1 := 2.89899$ $N_2 := 1.39394$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u \cdot (B - A)}{A^2 - 2 \cdot A \cdot B + B^2 + {N_u}^2} = 0.327074$$

$$Num := \frac{N_u \cdot (B - A)}{\sqrt{\left[N_u \cdot (B - A)\right]^2}}$$

$$Den := \frac{A^2 - 2 \cdot A \cdot B + B^2 + {N_u}^2}{\sqrt{\left(A^2 - 2 \cdot A \cdot B + B^2 + {N_u}^2\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left(A^2 - 2 \cdot A \cdot B + B^2 + {N_u}^2\right)^2} \cdot (B - A)}{\sqrt{{N_u}^2 \cdot (A - B)^2} \cdot \left(A^2 - 2 \cdot A \cdot B + B^2 + {N_u}^2\right)} = 0$$

For 2 variables there are 4 subsets.

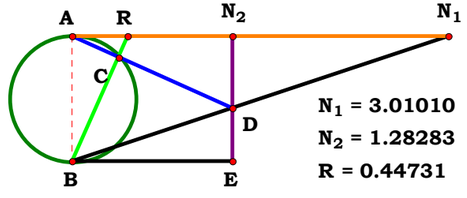
0, 0: 0

1, 0: $$-\frac{N_u\cdot(A-1)\cdot\sqrt{\left(A^2-2\cdot A+N_u{}^2+1\right)^2}}{\sqrt{N_u{}^2\cdot(A-1)^2}\cdot\left(A^2-2\cdot A+N_u{}^2+1\right)}$$

0, 2: $$\frac{N_u\cdot(B-1)\cdot\sqrt{\left(B^2-2\cdot B+N_u{}^2+1\right)^2}}{\sqrt{N_u{}^2\cdot(B-1)^2}\cdot\left(B^2-2\cdot B+N_u{}^2+1\right)}$$

1, 2: $$\frac{N_u\cdot\sqrt{\left(A^2-2\cdot A\cdot B+B^2+N_u{}^2\right)^2}\cdot(B-A)}{\sqrt{N_u{}^2\cdot(A-B)^2}\cdot\left(A^2-2\cdot A\cdot B+B^2+N_u{}^2\right)}$$

2SMT2R1



Unit. $AB := 1$ Given. $N_1 := 3.01010$ $N_2 := 1.28283$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$\frac{B - A}{N_u} = 0.447312$ $Num := \frac{B - A}{\sqrt{(B - A)^2}}$ $Den := \frac{N_u}{\sqrt{(N_u)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{N_u{}^2} \cdot (B - A)}{N_u \cdot \sqrt{(A - B)^2}} = 0$$

For 2 variables there are 4 subsets.

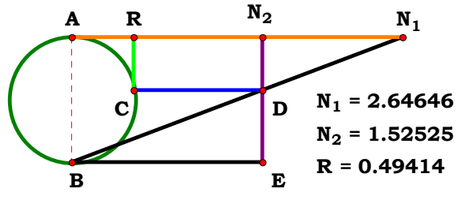
0, 0: 0

1, 0: $-\frac{(A-1)\cdot\sqrt{N_u{}^2}}{N_u\cdot\sqrt{(A-1)^2}}$

0, 2: $\frac{(B-1)\cdot\sqrt{N_u{}^2}}{N_u\cdot\sqrt{(B-1)^2}}$

1, 2: $\frac{\sqrt{N_u{}^2}\cdot(B-A)}{N_u\cdot\sqrt{(A-B)^2}}$

2SMT2R2



Unit. $AB := 1$ Given. $N_1 := 2.64646$ $N_2 := 1.52525$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

$\frac{A \cdot \sqrt{(B - A)}}{B \cdot \sqrt{A}} = 0.494138$ $Num := \frac{A \cdot \sqrt{(B - A)}}{\sqrt{\left[A \cdot \sqrt{(B - A)}\right]^2}}$ $Den := \frac{B \cdot \sqrt{A}}{\sqrt{\left(B \cdot \sqrt{A}\right)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{\sqrt{A} \cdot \sqrt{B - A} \cdot \sqrt{A \cdot B^2}}{B \cdot \sqrt{-A^2 \cdot (A - B)}} = 0$

For 2 variables there are 4 subsets.

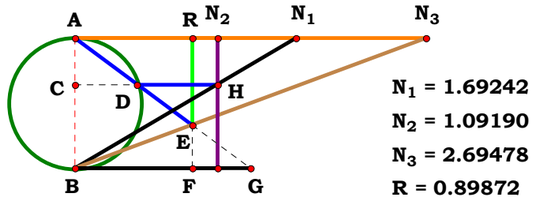
0, 0: 0

1, 0: $\frac{A \cdot \sqrt{1 - A}}{\sqrt{-A^2 \cdot (A - 1)}}$

0, 2: $\frac{\sqrt{B^2}}{B}$

1, 2: $\frac{\sqrt{A} \cdot \sqrt{B - A} \cdot \sqrt{A \cdot B^2}}{B \cdot \sqrt{-A^2 \cdot (A - B)}}$

2SMT2R3



$N_1 = 1.69242$
$N_2 = 1.09190$
$N_3 = 2.69478$
$R = 0.89872$

Unit. $AB := 1$ Given. $N_1 := 1.69242$ $N_2 := 1.09190$ $N_3 := 2.69478$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \sqrt{A \cdot (B - A)}}{C \cdot \sqrt{A \cdot (B - A)} + N_u \cdot (B - A)} = 0.898721$$

$$Num := \frac{N_u \cdot \sqrt{A \cdot (B - A)}}{\sqrt{\left[N_u \cdot \sqrt{A \cdot (B - A)}\right]^2}}$$

$$Den := \frac{C \cdot \sqrt{A \cdot (B - A)} + N_u \cdot (B - A)}{\sqrt{\left[C \cdot \sqrt{A \cdot (B - A)} + N_u \cdot (B - A)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A \cdot (B - A)} \cdot \sqrt{\left[N_u \cdot (A - B) - C \cdot \sqrt{A \cdot (B - A)}\right]^2}}{\left(C \cdot \sqrt{A \cdot B - A^2} - A \cdot N_u + B \cdot N_u\right) \cdot \sqrt{A \cdot {N_u}^2 \cdot (B - A)}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: **0**

1, 0, 0:
$$\frac{N_u\cdot\sqrt{\left[\sqrt{-A\cdot(A-1)}-N_u\cdot(A-1)\right]^2}\cdot\sqrt{-A\cdot(A-1)}}{\left(N_u-A\cdot N_u+\sqrt{A-A^2}\right)\cdot\sqrt{-A\cdot N_u{}^2\cdot(A-1)}}$$

0, 2, 0:
$$\frac{N_u\cdot\sqrt{\left[\sqrt{B-1}+N_u\cdot(B-1)\right]^2}\cdot\sqrt{B-1}}{\sqrt{N_u{}^2\cdot(B-1)}\cdot\left(B\cdot N_u-N_u+\sqrt{B-1}\right)}$$

1, 2, 0:
$$\frac{N_u\cdot\sqrt{\left[\sqrt{-A\cdot(A-B)}-N_u\cdot(A-B)\right]^2}\cdot\sqrt{-A\cdot(A-B)}}{\sqrt{-A\cdot N_u{}^2\cdot(A-B)}\cdot\left(B\cdot N_u-A\cdot N_u+\sqrt{A\cdot B-A^2}\right)}$$

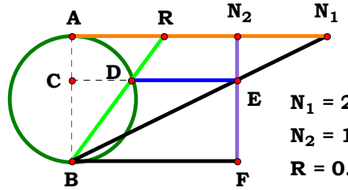
0, 0, 3: **0**

1, 0, 3:
$$\frac{N_u\cdot\sqrt{\left[C\cdot\sqrt{-A\cdot(A-1)}-N_u\cdot(A-1)\right]^2}\cdot\sqrt{-A\cdot(A-1)}}{\left(N_u-A\cdot N_u+C\cdot\sqrt{A-A^2}\right)\cdot\sqrt{-A\cdot N_u{}^2\cdot(A-1)}}$$

0, 2, 3:
$$\frac{N_u\cdot\sqrt{B-1}\cdot\sqrt{\left[C\cdot\sqrt{B-1}+N_u\cdot(B-1)\right]^2}}{\sqrt{N_u{}^2\cdot(B-1)}\cdot\left(C\cdot\sqrt{B-1}-N_u+B\cdot N_u\right)}$$

1, 2, 3:
$$\frac{N_u\cdot\sqrt{A\cdot(B-A)}\cdot\sqrt{\left[N_u\cdot(A-B)-C\cdot\sqrt{A\cdot(B-A)}\right]^2}}{\left(C\cdot\sqrt{A\cdot B-A^2}-A\cdot N_u+B\cdot N_u\right)\cdot\sqrt{A\cdot N_u{}^2\cdot(B-A)}}$$

2SMT2R4



$N_1 = 2.04040$
$N_2 = 1.32323$
$R = 0.73620$

Unit. $AB := 1$ Given. $N_1 := 2.04040$ $N_2 := 1.32323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$\frac{B \cdot \sqrt{B - A}}{\sqrt{A \cdot B^2}} = 0.736196$ $Num := \frac{B \cdot \sqrt{B - A}}{\sqrt{(B \cdot \sqrt{B - A})^2}}$ $Den := \frac{\sqrt{A \cdot B^2}}{\sqrt{(\sqrt{A \cdot B^2})^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{B \cdot \sqrt{B - A}}{\sqrt{B^2 \cdot (B - A)}} = 0$

For 2 variables there are 4 subsets.

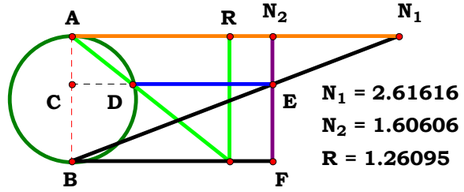
0, 0: **0**

1, 0: **1**

0, 2: $$\frac{B \cdot \sqrt{B-1}}{\sqrt{B^2 \cdot (B-1)}}$$

1, 2: $$\frac{B \cdot \sqrt{B-A}}{\sqrt{B^2 \cdot (B-A)}}$$

2SMT2R5



Unit. $AB := 1$ Given. $N_1 := 2.61616$ $N_2 := 1.60606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{\sqrt{N_u}\cdot\sqrt{A\cdot B}}{\sqrt{B}\cdot\sqrt{B\cdot N_u - A\cdot N_u}} = 1.260952$$

$$Num := \frac{\sqrt{N_u}\cdot\sqrt{A\cdot B}}{\sqrt{\left(\sqrt{N_u}\cdot\sqrt{A\cdot B}\right)^2}}$$

$$Den := \frac{\sqrt{B}\cdot\sqrt{B\cdot N_u - A\cdot N_u}}{\sqrt{\left(\sqrt{B}\cdot\sqrt{B\cdot N_u - A\cdot N_u}\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\sqrt{-B\cdot\left(A\cdot N_u - B\cdot N_u\right)}}{\sqrt{B}\cdot\sqrt{B\cdot N_u - A\cdot N_u}\cdot\sqrt{A\cdot B\cdot N_u}} = 0$$

For 2 variables there are 4 subsets.

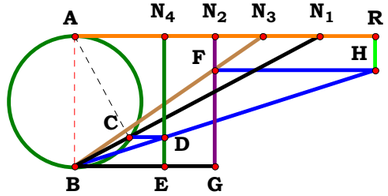
0, 0: 0

1, 0: $\frac{\sqrt{A}\cdot\sqrt{N_u}}{\sqrt{A\cdot N_u}}$

0, 2: $\frac{\sqrt{N_u}\cdot\sqrt{-B\cdot\left(N_u-B\cdot N_u\right)}}{\sqrt{B\cdot N_u-N_u}\cdot\sqrt{B\cdot N_u}}$

1, 2: $\frac{\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\sqrt{-B\cdot\left(A\cdot N_u-B\cdot N_u\right)}}{\sqrt{B}\cdot\sqrt{B\cdot N_u-A\cdot N_u}\cdot\sqrt{A\cdot B\cdot N_u}}$

2SMT2R6



$N_1 = 1.87645$
$N_2 = 1.07253$
$N_3 = 1.44532$
$N_4 = 0.68746$
$R = 2.30640$

Unit. $AB := 1$ Given. $N_1 := 1.87645$ $N_2 := 1.07253$ $N_3 := 1.44532$ $N_4 := .68746$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{C \cdot N_u \cdot \left(A^2 + N_u^{\,2}\right)}{A^2 \cdot B \cdot D} = 2.306394$$

$$Num := \frac{C \cdot N_u \cdot \left(A^2 + N_u^{\,2}\right)}{\sqrt{\left[C \cdot N_u \cdot \left(A^2 + N_u^{\,2}\right)\right]^2}}$$

$$Den := \frac{A^2 \cdot B \cdot D}{\sqrt{\left(A^2 \cdot B \cdot D\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot N_u \cdot \left(A^2 + N_u^{\,2}\right) \cdot \sqrt{A^4 \cdot B^2 \cdot D^2}}{A^2 \cdot B \cdot D \cdot \sqrt{C^2 \cdot N_u^{\,2} \cdot \left(A^2 + N_u^{\,2}\right)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:
$$\frac{N_u \cdot \left(N_u^2 + 1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 0, 0:
$$\frac{N_u \cdot \sqrt{A^4} \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 2, 0, 0:
$$\frac{N_u \cdot \sqrt{B^2} \cdot \left(N_u^2 + 1\right)}{B \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 2, 0, 0:
$$\frac{N_u \cdot \sqrt{A^4 \cdot B^2} \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot B \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 0, 3, 0:
$$\frac{C \cdot N_u \cdot \left(N_u^2 + 1\right)}{\sqrt{C^2 \cdot N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 3, 0:
$$\frac{C \cdot N_u \cdot \sqrt{A^4} \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 2, 3, 0:
$$\frac{C \cdot N_u \cdot \sqrt{B^2} \cdot \left(N_u^2 + 1\right)}{B \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 2, 3, 0:
$$\frac{C \cdot N_u \cdot \sqrt{A^4 \cdot B^2} \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot B \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 0, 0, 4:
$$\frac{N_u \cdot \sqrt{D^2} \cdot \left(N_u^2 + 1\right)}{D \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 0, 4:
$$\frac{N_u \cdot \sqrt{A^4 \cdot D^2} \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot D \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 2, 0, 4:
$$\frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot \left(N_u^2 + 1\right)}{B \cdot D \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 2, 0, 4:
$$\frac{N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{A^4 \cdot B^2 \cdot D^2}}{A^2 \cdot B \cdot D \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

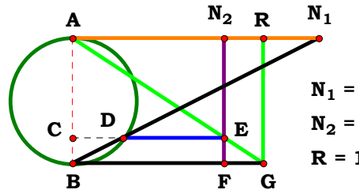
0, 0, 3, 4:
$$\frac{C \cdot N_u \cdot \sqrt{D^2} \cdot \left(N_u^2 + 1\right)}{D \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 3, 4:
$$\frac{C \cdot N_u \cdot \sqrt{A^4 \cdot D^2} \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot D \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 2, 3, 4:
$$\frac{C \cdot N_u \cdot \sqrt{B^2 \cdot D^2} \cdot \left(N_u^2 + 1\right)}{B \cdot D \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 2, 3, 4:
$$\frac{C \cdot N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{A^4 \cdot B^2 \cdot D^2}}{A^2 \cdot B \cdot D \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

2SMT2R7



$N_1 = 1.96970$

$N_2 = 1.21212$

$R = 1.52455$

Unit. $AB := 1$ **Given.** $N_1 := 1.96970$ $N_2 := 1.21212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$\frac{A^2 + N_u^2}{B \cdot N_u} = 1.524545$ $Num := \frac{A^2 + N_u^2}{\sqrt{\left(A^2 + N_u^2\right)^2}}$ $Den := \frac{B \cdot N_u}{\sqrt{\left(B \cdot N_u\right)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{\sqrt{B^2 \cdot N_u^2} \cdot \left(A^2 + N_u^2\right)}{B \cdot N_u \cdot \sqrt{\left(A^2 + N_u^2\right)^2}} = 0$

For 2 variables there are 4 subsets.

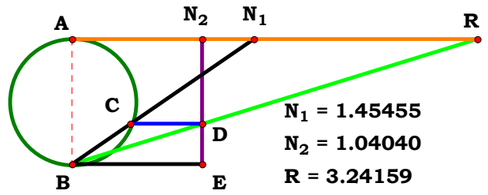
0, 0: $$\frac{\sqrt{B^2 \cdot N_u{}^2} \cdot \left(A^2 + N_u{}^2\right)}{B \cdot N_u \cdot \sqrt{\left(A^2 + N_u{}^2\right)^2}}$$

1, 0: $$\frac{\sqrt{B^2 \cdot N_u{}^2} \cdot \left(A^2 + N_u{}^2\right)}{B \cdot N_u \cdot \sqrt{\left(A^2 + N_u{}^2\right)^2}}$$

0, 2: $$\frac{\sqrt{B^2 \cdot N_u{}^2} \cdot \left(A^2 + N_u{}^2\right)}{B \cdot N_u \cdot \sqrt{\left(A^2 + N_u{}^2\right)^2}}$$

1, 2: $$\frac{\sqrt{B^2 \cdot N_u{}^2} \cdot \left(A^2 + N_u{}^2\right)}{B \cdot N_u \cdot \sqrt{\left(A^2 + N_u{}^2\right)^2}}$$

2SMT2R8



Unit. $AB := 1$ Given. $N_1 := 1.45455$ $N_2 := 1.04040$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot B} = 3.241591$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u^2\right)\right]^2}}$$

$$Den := \frac{A^2 \cdot B}{\sqrt{\left(A^2 \cdot B\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^4 \cdot B^2} \cdot \left(A^2 + N_u^2\right)}{A^2 \cdot B \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}} = 0$$

For 2 variables there are 4 subsets.

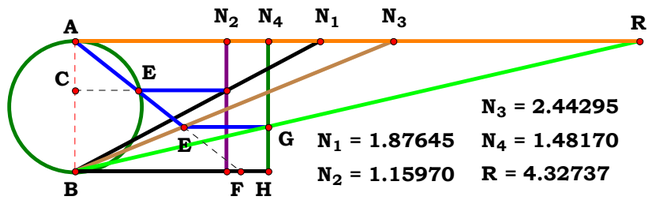
0, 0: $$\frac{N_u \cdot \left(N_u^{\,2} + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} + 1\right)^2}}$$

1, 0: $$\frac{N_u \cdot \sqrt{A^4} \cdot \left(A^2 + N_u^{\,2}\right)}{A^2 \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2}\right)^2}}$$

0, 2: $$\frac{N_u \cdot \sqrt{B^2} \cdot \left(N_u^{\,2} + 1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} + 1\right)^2}}$$

1, 2: $$\frac{N_u \cdot \sqrt{A^4 \cdot B^2} \cdot \left(A^2 + N_u^{\,2}\right)}{A^2 \cdot B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2}\right)^2}}$$

2SMT2R9



Unit. $AB := 1$ Given. $N_1 := 1.87645$ $N_2 := 1.15970$ $N_3 := 2.44295$ $N_4 := 1.48170$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left[N_u \cdot (B - A) + C \cdot \sqrt{A \cdot (B - A)}\right]}{C \cdot D \cdot \sqrt{A \cdot (B - A)}} = 4.327379$$

$$Num := \frac{N_u \cdot \left[N_u \cdot (B - A) + C \cdot \sqrt{A \cdot (B - A)}\right]}{\sqrt{\left[N_u \cdot \left[N_u \cdot (B - A) + C \cdot \sqrt{A \cdot (B - A)}\right]\right]^2}}$$

$$Den := \frac{C \cdot D \cdot \sqrt{A \cdot (B - A)}}{\sqrt{\left[C \cdot D \cdot \sqrt{A \cdot (B - A)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C \cdot \sqrt{A \cdot B - A^2} - A \cdot N_u + B \cdot N_u\right) \cdot \sqrt{-A \cdot C^2 \cdot D^2 \cdot (A - B)}}{C \cdot D \cdot \sqrt{A \cdot (B - A)} \cdot \sqrt{{N_u}^2 \cdot \left[N_u \cdot (A - B) - C \cdot \sqrt{-A \cdot (A - B)}\right]^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0: $$\frac{N_u \cdot \left(N_u - A \cdot N_u + \sqrt{A - A^2}\right)}{\sqrt{N_u^2 \cdot \left[\sqrt{-A \cdot (A-1)} - N_u \cdot (A-1)\right]^2}}$$

0, 2, 0, 0: $$\frac{N_u \cdot \left(B \cdot N_u - N_u + \sqrt{B-1}\right)}{\sqrt{N_u^2 \cdot \left[\sqrt{B-1} + N_u \cdot (B-1)\right]^2}}$$

1, 2, 0, 0: $$\frac{N_u \cdot \left(B \cdot N_u - A \cdot N_u + \sqrt{A \cdot B - A^2}\right)}{\sqrt{N_u^2 \cdot \left[\sqrt{-A \cdot (A-B)} - N_u \cdot (A-B)\right]^2}}$$

0, 0, 3, 0: 0

1, 0, 3, 0: $$\frac{N_u \cdot \left(N_u - A \cdot N_u + C \cdot \sqrt{A - A^2}\right) \cdot \sqrt{-A \cdot C^2 \cdot (A-1)}}{C \cdot \sqrt{N_u^2 \cdot \left[C \cdot \sqrt{-A \cdot (A-1)} - N_u \cdot (A-1)\right]^2} \cdot \sqrt{-A \cdot (A-1)}}$$

0, 2, 3, 0: $$\frac{N_u \cdot \sqrt{C^2 \cdot (B-1)} \cdot \left(C \cdot \sqrt{B-1} - N_u + B \cdot N_u\right)}{C \cdot \sqrt{B-1} \cdot \sqrt{N_u^2 \cdot \left[C \cdot \sqrt{B-1} + N_u \cdot (B-1)\right]^2}}$$

1, 2, 3, 0: $$\frac{N_u \cdot \sqrt{-A \cdot C^2 \cdot (A-B)} \cdot \left(C \cdot \sqrt{A \cdot B - A^2} - A \cdot N_u + B \cdot N_u\right)}{C \cdot \sqrt{-A \cdot (A-B)} \cdot \sqrt{N_u^2 \cdot \left[N_u \cdot (A-B) - C \cdot \sqrt{-A \cdot (A-B)}\right]^2}}$$

0, 0, 0, 4: 0

1, 0, 0, 4: $$\frac{N_u \cdot \left(N_u - A \cdot N_u + \sqrt{A - A^2}\right) \cdot \sqrt{-A \cdot D^2 \cdot (A-1)}}{D \cdot \sqrt{-A \cdot (A-1)} \cdot \sqrt{N_u^2 \cdot \left[\sqrt{-A \cdot (A-1)} - N_u \cdot (A-1)\right]^2}}$$

0, 2, 0, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot (B-1)} \cdot \left(B \cdot N_u - N_u + \sqrt{B-1}\right)}{D \cdot \sqrt{B-1} \cdot \sqrt{N_u^2 \cdot \left[\sqrt{B-1} + N_u \cdot (B-1)\right]^2}}$$

1, 2, 0, 4: $$\frac{N_u \cdot \sqrt{-A \cdot D^2 \cdot (A-B)} \cdot \left(B \cdot N_u - A \cdot N_u + \sqrt{A \cdot B - A^2}\right)}{D \cdot \sqrt{N_u^2 \cdot \left[\sqrt{-A \cdot (A-B)} - N_u \cdot (A-B)\right]^2} \cdot \sqrt{-A \cdot (A-B)}}$$

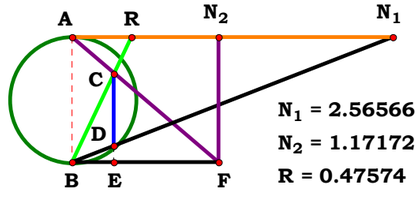
0, 0, 3, 4: 0

1, 0, 3, 4: $$\frac{N_u \cdot \left(N_u - A \cdot N_u + C \cdot \sqrt{A - A^2}\right) \cdot \sqrt{-A \cdot C^2 \cdot D^2 \cdot (A-1)}}{C \cdot D \cdot \sqrt{N_u^2 \cdot \left[C \cdot \sqrt{-A \cdot (A-1)} - N_u \cdot (A-1)\right]^2} \cdot \sqrt{-A \cdot (A-1)}}$$

0, 2, 3, 4: $$\frac{N_u \cdot \sqrt{C^2 \cdot D^2 \cdot (B-1)} \cdot \left(C \cdot \sqrt{B-1} - N_u + B \cdot N_u\right)}{C \cdot D \cdot \sqrt{B-1} \cdot \sqrt{N_u^2 \cdot \left[C \cdot \sqrt{B-1} + N_u \cdot (B-1)\right]^2}}$$

1, 2, 3, 4: $$\frac{N_u \cdot \left(C \cdot \sqrt{A \cdot B - A^2} - A \cdot N_u + B \cdot N_u\right) \cdot \sqrt{-A \cdot C^2 \cdot D^2 \cdot (A-B)}}{C \cdot D \cdot \sqrt{A \cdot (B-A)} \cdot \sqrt{N_u^2 \cdot \left[N_u \cdot (A-B) - C \cdot \sqrt{-A \cdot (A-B)}\right]^2}}$$

2SMT3R0



Unit. $AB := 1$ Given. $N_1 := 2.56566$ $N_2 := 1.17172$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A \cdot N_u}{A^2 - B \cdot A + N_u^2} = 0.475743$$

$$Num := \frac{A \cdot N_u}{\sqrt{(A \cdot N_u)^2}}$$

$$Den := \frac{A^2 - B \cdot A + N_u^2}{\sqrt{\left(A^2 - B \cdot A + N_u^2\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{\left(A^2 - B \cdot A + N_u^2\right)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot \left(A^2 - B \cdot A + N_u^2\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{\sqrt{N_u{}^4}}{N_u \cdot \sqrt{N_u{}^2}}$$

1, 0:

$$\frac{A \cdot N_u \cdot \sqrt{\left(A^2 - A + N_u{}^2\right)^2}}{\sqrt{A^2 \cdot N_u{}^2} \cdot \left(A^2 - A + N_u{}^2\right)}$$

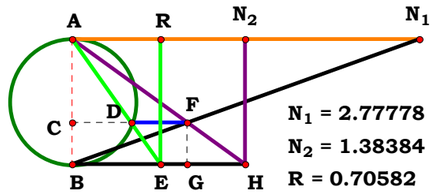
0, 2:

$$\frac{N_u \cdot \sqrt{\left(N_u{}^2 - B + 1\right)^2}}{\sqrt{N_u{}^2} \cdot \left(N_u{}^2 - B + 1\right)}$$

1, 2:

$$\frac{A \cdot N_u \cdot \sqrt{\left(A^2 - B \cdot A + N_u{}^2\right)^2}}{\sqrt{A^2 \cdot N_u{}^2} \cdot \left(A^2 - B \cdot A + N_u{}^2\right)}$$

2SMT3R1



Unit. $AB := 1$ Given. $N_1 := 2.77778$ $N_2 := 1.38384$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$\frac{A}{\sqrt{A \cdot B}} = 0.70582$ $Num := \frac{A}{\sqrt{(A)^2}}$ $Den := \frac{\sqrt{A \cdot B}}{\sqrt{(\sqrt{A \cdot B})^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{A}{\sqrt{A^2}} = 0$

For 2 variables there are 4 subsets.

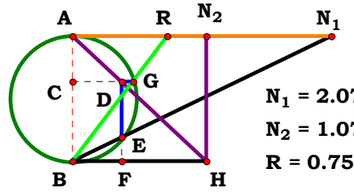
0, 0: **1**

1, 0: $\frac{\mathbf{A}}{\sqrt{\mathbf{A}^2}}$

0, 2: **1**

1, 2: $\frac{\mathbf{A}}{\sqrt{\mathbf{A}^2}}$

2SMT3R2



$N_1 = 2.07071$
$N_2 = 1.07071$
$R = 0.75937$

Unit. $AB := 1$ Given. $N_1 := 2.07071$ $N_2 := 1.07071$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

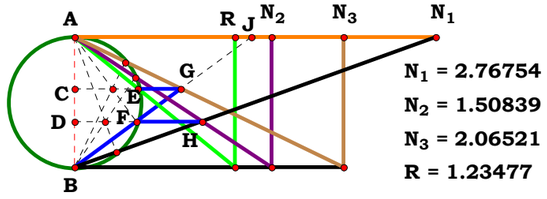
$$\frac{\sqrt{A \cdot B}}{\sqrt{\left(A^2 - B \cdot A + N_u{}^2\right)}} = 0.759364$$ $Num := 1$ $Den := 1$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - 1 = 0$

2SMT3R3



$N_1 = 2.76754$
$N_2 = 1.50839$
$N_3 = 2.06521$
$R = 1.23477$

Unit. $AB := 1$ **Given.** $N_1 := 2.76754$ $N_2 := 1.50839$ $N_3 := 2.06521$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A \cdot N_u \cdot \sqrt{A+B}}{\sqrt{N_u \cdot (A+B)} \cdot (A \cdot B)^{\frac{1}{4}} \cdot \sqrt{A \cdot C}} = 1.234773$$

$$Num := \frac{A \cdot N_u \cdot \sqrt{A+B}}{\sqrt{\left(A \cdot N_u \cdot \sqrt{A+B}\right)^2}}$$

$$Den := \frac{\sqrt{N_u \cdot (A+B)} \cdot (A \cdot B)^{\frac{1}{4}} \cdot \sqrt{A \cdot C}}{\sqrt{\left[\sqrt{N_u \cdot (A+B)} \cdot (A \cdot B)^{\frac{1}{4}} \cdot \sqrt{A \cdot C}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{A+B} \cdot \sqrt{A \cdot C \cdot N_u \cdot \sqrt{A \cdot B} \cdot (A+B)}}{1} = 0$$

$$\sqrt{N_u \cdot (A+B)} \cdot (A \cdot B)^{\frac{1}{4}} \cdot \sqrt{A \cdot C} \cdot \sqrt{A^2 \cdot N_u^{\,2} \cdot (A+B)}$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u}{\sqrt{N_u^{\,2}}}$$

1, 0, 0:

$$\frac{A^{\frac{1}{4}} \cdot N_u \cdot \sqrt{A+1} \cdot \sqrt{A^{\frac{3}{2}} \cdot N_u \cdot (A+1)}}{\sqrt{N_u \cdot (A+1)} \cdot \sqrt{A^2 \cdot N_u^{\,2} \cdot (A+1)}}$$

0, 2, 0:

$$\frac{N_u \cdot \sqrt{B+1} \cdot \sqrt{\sqrt{B} \cdot N_u \cdot (B+1)}}{B^{\frac{1}{4}} \cdot \sqrt{N_u^{\,2} \cdot (B+1)} \cdot \sqrt{N_u \cdot (B+1)}}$$

1, 2, 0:

$$\frac{\sqrt{A} \cdot N_u \cdot \sqrt{A+B} \cdot \sqrt{A \cdot N_u \cdot \sqrt{A \cdot B} \cdot (A+B)}}{\sqrt{N_u \cdot (A+B)} \cdot (A \cdot B)^{\frac{1}{4}} \cdot \sqrt{A^2 \cdot N_u^{\,2} \cdot (A+B)}}$$

0, 0, 3:

$$\frac{\sqrt{N_u} \cdot \sqrt{C \cdot N_u}}{\sqrt{C} \cdot \sqrt{N_u^{\,2}}}$$

1, 0, 3:

$$\frac{A^{\frac{3}{4}} \cdot N_u \cdot \sqrt{A+1} \cdot \sqrt{A^{\frac{3}{2}} \cdot C \cdot N_u \cdot (A+1)}}{\sqrt{A \cdot C} \cdot \sqrt{N_u \cdot (A+1)} \cdot \sqrt{A^2 \cdot N_u^{\,2} \cdot (A+1)}}$$

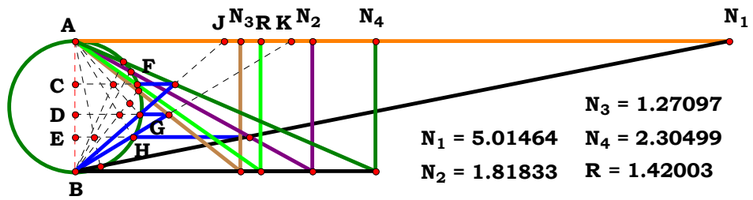
0, 2, 3:

$$\frac{N_u \cdot \sqrt{B+1} \cdot \sqrt{\sqrt{B} \cdot C \cdot N_u \cdot (B+1)}}{B^{\frac{1}{4}} \cdot \sqrt{C} \cdot \sqrt{N_u^{\,2} \cdot (B+1)} \cdot \sqrt{N_u \cdot (B+1)}}$$

1, 2, 3:

$$\frac{A \cdot N_u \cdot \sqrt{A+B} \cdot \sqrt{A \cdot C \cdot N_u \cdot \sqrt{A \cdot B} \cdot (A+B)}}{\sqrt{N_u \cdot (A+B)} \cdot (A \cdot B)^{\frac{1}{4}} \cdot \sqrt{A \cdot C} \cdot \sqrt{A^2 \cdot N_u^{\,2} \cdot (A+B)}}$$

2SMT3R4



Unit. $AB := 1$ **Given.** $N_1 := 5.01464$ $N_2 := 1.81833$ $N_3 := 1.27097$ $N_4 := 2.30499$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{8}} \cdot (B \cdot C)^{\frac{1}{4}}}}{\sqrt{B \cdot C \cdot D}} = 1.42003 \qquad Num := \frac{\sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{8}} \cdot (B \cdot C)^{\frac{1}{4}}}}{\sqrt{\left[\sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{8}} \cdot (B \cdot C)^{\frac{1}{4}}}\right]^2}} \qquad Den := \frac{\sqrt{B \cdot C \cdot D}}{\sqrt{\left(\sqrt{B \cdot C \cdot D}\right)^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{8}} \cdot (B \cdot C)^{\frac{1}{4}}}}{\sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{4}} \cdot \sqrt{B \cdot C}}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 1

0, 0, 3, 0: $\frac{C^{\frac{1}{4}} \cdot \sqrt{N_u{}^{\frac{3}{2}}}}{\sqrt{\sqrt{C} \cdot N_u{}^{\frac{3}{2}}}}$

1, 0, 0, 0: $\frac{A^{\frac{1}{8}} \cdot \sqrt{N_u{}^{\frac{3}{2}}}}{\sqrt{A^{\frac{1}{4}} \cdot N_u{}^{\frac{3}{2}}}}$

1, 0, 3, 0: $\frac{A^{\frac{1}{8}} \cdot C^{\frac{1}{4}} \cdot \sqrt{N_u{}^{\frac{3}{2}}}}{\sqrt{A^{\frac{1}{4}} \cdot \sqrt{C} \cdot N_u{}^{\frac{3}{2}}}}$

0, 2, 0, 0: $\frac{B^{\frac{3}{8}} \cdot \sqrt{N_u{}^{\frac{3}{2}}}}{\sqrt{B^{\frac{3}{4}} \cdot N_u{}^{\frac{3}{2}}}}$

0, 2, 3, 0: $\frac{B^{\frac{1}{8}} \cdot \sqrt{N_u{}^{\frac{3}{2}} \cdot (B \cdot C)^{\frac{1}{4}}}}{\sqrt{B^{\frac{1}{4}} \cdot N_u{}^{\frac{3}{2}} \cdot \sqrt{B \cdot C}}}$

1, 2, 0, 0: $\frac{B^{\frac{1}{4}} \cdot \sqrt{N_u{}^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{8}}}}{\sqrt{\sqrt{B} \cdot N_u{}^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{4}}}}$

1, 2, 3, 0: $\frac{\sqrt{N_u{}^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{8}} \cdot (B \cdot C)^{\frac{1}{4}}}}{\sqrt{N_u{}^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{4}} \cdot \sqrt{B \cdot C}}}$

0, 0, 0, 4: 1

0, 0, 3, 4: $\frac{C^{\frac{1}{4}} \cdot \sqrt{N_u^{\frac{3}{2}}}}{\sqrt{\sqrt{C} \cdot N_u^{\frac{3}{2}}}}$

1, 0, 0, 4: $\frac{A^{\frac{1}{8}} \cdot \sqrt{N_u^{\frac{3}{2}}}}{\sqrt{A^{\frac{1}{4}} \cdot N_u^{\frac{3}{2}}}}$

1, 0, 3, 4: $\frac{A^{\frac{1}{8}} \cdot C^{\frac{1}{4}} \cdot \sqrt{N_u^{\frac{3}{2}}}}{\sqrt{A^{\frac{1}{4}} \cdot \sqrt{C} \cdot N_u^{\frac{3}{2}}}}$

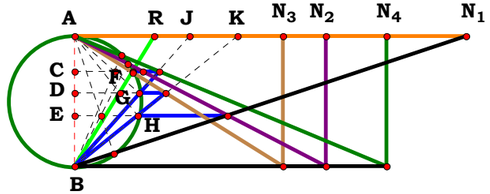
0, 2, 0, 4: $\frac{B^{\frac{3}{8}} \cdot \sqrt{N_u^{\frac{3}{2}}}}{\sqrt{B^{\frac{3}{4}} \cdot N_u^{\frac{3}{2}}}}$

0, 2, 3, 4: $\frac{B^{\frac{1}{8}} \cdot \sqrt{N_u^{\frac{3}{2}} \cdot (B \cdot C)^{\frac{1}{4}}}}{\sqrt{B^{\frac{1}{4}} \cdot N_u^{\frac{3}{2}} \cdot \sqrt{B \cdot C}}}$

1, 2, 0, 4: $\frac{B^{\frac{1}{4}} \cdot \sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{8}}}}{\sqrt{\sqrt{B} \cdot N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{4}}}}$

1, 2, 3, 4: $\frac{\sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{8}} \cdot (B \cdot C)^{\frac{1}{4}}}}{\sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{4}} \cdot \sqrt{B \cdot C}}}$

2SMT3R5



$N_1 = 3.00000$
$N_2 = 1.92488$
$N_3 = 1.60029$
$N_4 = 2.39216$
$R = 0.60764$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 1.92488$ $N_3 := 1.60029$ $N_4 := 2.39216$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\left(B \cdot C \cdot D^2\right)^{\frac{1}{4}}}{N_u^{\frac{3}{4}} \cdot (A \cdot B)^{\frac{1}{8}}} = 0.607638$$

$$Num := \frac{\left(B \cdot C \cdot D^2\right)^{\frac{1}{4}}}{\sqrt{\left[\left(B \cdot C \cdot D^2\right)^{\frac{1}{4}}\right]^2}}$$

$$Den := \frac{N_u^{\frac{3}{4}} \cdot (A \cdot B)^{\frac{1}{8}}}{\sqrt{\left[N_u^{\frac{3}{4}} \cdot (A \cdot B)^{\frac{1}{8}}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{4}}}}{N_u^{\frac{3}{4}} \cdot (A \cdot B)^{\frac{1}{8}}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\dfrac{\sqrt{N_u^{\frac{3}{2}}}}{N_u^{\frac{3}{4}}}$

0, 0, 3, 0: $\dfrac{\sqrt{N_u^{\frac{3}{2}}}}{N_u^{\frac{3}{4}}}$

0, 0, 0, 4: $\dfrac{\sqrt{N_u^{\frac{3}{2}}}}{N_u^{\frac{3}{4}}}$

0, 0, 3, 4: $\dfrac{\sqrt{N_u^{\frac{3}{2}}}}{N_u^{\frac{3}{4}}}$

1, 0, 0, 0: $\dfrac{\sqrt{A^{\frac{1}{4}} \cdot N_u^{\frac{3}{2}}}}{A^{\frac{1}{8}} \cdot N_u^{\frac{3}{4}}}$

1, 0, 3, 0: $\dfrac{\sqrt{A^{\frac{1}{4}} \cdot N_u^{\frac{3}{2}}}}{A^{\frac{1}{8}} \cdot N_u^{\frac{3}{4}}}$

1, 0, 0, 4: $\dfrac{\sqrt{A^{\frac{1}{4}} \cdot N_u^{\frac{3}{2}}}}{A^{\frac{1}{8}} \cdot N_u^{\frac{3}{4}}}$

1, 0, 3, 4: $\dfrac{\sqrt{A^{\frac{1}{4}} \cdot N_u^{\frac{3}{2}}}}{A^{\frac{1}{8}} \cdot N_u^{\frac{3}{4}}}$

0, 2, 0, 0: $\dfrac{\sqrt{B^{\frac{1}{4}} \cdot N_u^{\frac{3}{2}}}}{B^{\frac{1}{8}} \cdot N_u^{\frac{3}{4}}}$

0, 2, 3, 0: $\dfrac{\sqrt{B^{\frac{1}{4}} \cdot N_u^{\frac{3}{2}}}}{B^{\frac{1}{8}} \cdot N_u^{\frac{3}{4}}}$

0, 2, 0, 4: $\dfrac{\sqrt{B^{\frac{1}{4}} \cdot N_u^{\frac{3}{2}}}}{B^{\frac{1}{8}} \cdot N_u^{\frac{3}{4}}}$

0, 2, 3, 4: $\dfrac{\sqrt{B^{\frac{1}{4}} \cdot N_u^{\frac{3}{2}}}}{B^{\frac{1}{8}} \cdot N_u^{\frac{3}{4}}}$

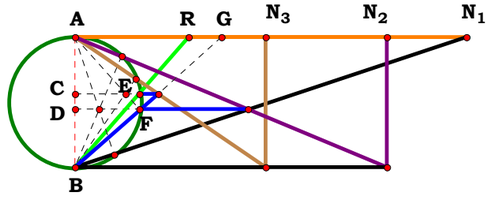
1, 2, 0, 0: $\dfrac{\sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{4}}}}{N_u^{\frac{3}{4}} \cdot (A \cdot B)^{\frac{1}{8}}}$

1, 2, 3, 0: $\dfrac{\sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{4}}}}{N_u^{\frac{3}{4}} \cdot (A \cdot B)^{\frac{1}{8}}}$

1, 2, 0, 4: $\dfrac{\sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{4}}}}{N_u^{\frac{3}{4}} \cdot (A \cdot B)^{\frac{1}{8}}}$

1, 2, 3, 4: $\dfrac{\sqrt{N_u^{\frac{3}{2}} \cdot (A \cdot B)^{\frac{1}{4}}}}{N_u^{\frac{3}{4}} \cdot (A \cdot B)^{\frac{1}{8}}}$

2SMT3R6



$N_1 = 3.00000$
$N_2 = 2.38980$
$N_3 = 1.46469$
$R = 0.87462$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 2.38980$ $N_3 := 1.46469$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{B \cdot C}}{\sqrt{N_u} \cdot (A \cdot B)^{\frac{1}{4}}} = 0.874615$$

$$Num := \frac{\sqrt{B \cdot C}}{\sqrt{\left(\sqrt{B \cdot C}\right)^2}}$$

$$Den := \frac{\sqrt{N_u} \cdot (A \cdot B)^{\frac{1}{4}}}{\sqrt{\left[\sqrt{N_u} \cdot (A \cdot B)^{\frac{1}{4}}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{N_u \cdot \sqrt{A \cdot B}}}{\sqrt{N_u} \cdot (A \cdot B)^{\frac{1}{4}}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: 1

1, 0, 0: $\frac{\sqrt{\sqrt{A} \cdot N_u}}{A^{\frac{1}{4}} \cdot \sqrt{N_u}}$

0, 2, 0: $\frac{\sqrt{\sqrt{B} \cdot N_u}}{B^{\frac{1}{4}} \cdot \sqrt{N_u}}$

1, 2, 0: $\frac{\sqrt{N_u \cdot \sqrt{A \cdot B}}}{\sqrt{N_u} \cdot (A \cdot B)^{\frac{1}{4}}}$

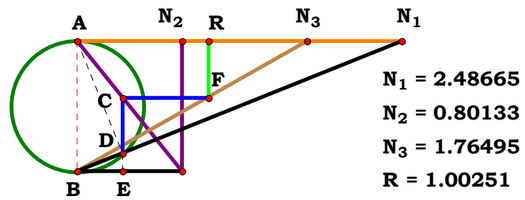
0, 0, 3: 1

1, 0, 3: $\frac{\sqrt{\sqrt{A} \cdot N_u}}{A^{\frac{1}{4}} \cdot \sqrt{N_u}}$

0, 2, 3: $\frac{\sqrt{\sqrt{B} \cdot N_u}}{B^{\frac{1}{4}} \cdot \sqrt{N_u}}$

1, 2, 3: $\frac{\sqrt{N_u \cdot \sqrt{A \cdot B}}}{\sqrt{N_u} \cdot (A \cdot B)^{\frac{1}{4}}}$

2SMT3R7



$N_1 = 2.48665$
$N_2 = 0.80133$
$N_3 = 1.76495$
$R = 1.00251$

Unit. $AB := 1$ **Given.** $N_1 := 2.48665$ $N_2 := .80133$ $N_3 := 1.76495$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - B \cdot A + N_u^2\right)}{C \cdot \left(A^2 + N_u^2\right)} = 1.002513$$

$$Num := \frac{N_u \cdot \left(A^2 - B \cdot A + N_u^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 - B \cdot A + N_u^2\right)\right]^2}}$$

$$Den := \frac{C \cdot \left(A^2 + N_u^2\right)}{\sqrt{\left[C \cdot \left(A^2 + N_u^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{C^2 \cdot \left(A^2 + N_u^2\right)^2} \cdot \left(A^2 - B \cdot A + N_u^2\right)}{C \cdot \sqrt{N_u^2 \cdot \left(A^2 - B \cdot A + N_u^2\right)^2} \cdot \left(A^2 + N_u^2\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u^{3}\cdot\sqrt{\left(N_u^{2}+1\right)^{2}}}{\sqrt{N_u^{6}}\cdot\left(N_u^{2}+1\right)}$$

0, 0, 3: $$\frac{N_u^{3}\cdot\sqrt{C^{2}\cdot\left(N_u^{2}+1\right)^{2}}}{C\cdot\sqrt{N_u^{6}}\cdot\left(N_u^{2}+1\right)}$$

1, 0, 0: $$\frac{N_u\cdot\sqrt{\left(A^{2}+N_u^{2}\right)^{2}}\cdot\left(A^{2}-A+N_u^{2}\right)}{\left(A^{2}+N_u^{2}\right)\cdot\sqrt{N_u^{2}\cdot\left(A^{2}-A+N_u^{2}\right)^{2}}}$$

1, 0, 3: $$\frac{N_u\cdot\sqrt{C^{2}\cdot\left(A^{2}+N_u^{2}\right)^{2}}\cdot\left(A^{2}-A+N_u^{2}\right)}{C\cdot\left(A^{2}+N_u^{2}\right)\cdot\sqrt{N_u^{2}\cdot\left(A^{2}-A+N_u^{2}\right)^{2}}}$$

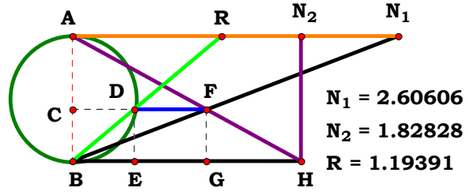
0, 2, 0: $$\frac{N_u\cdot\sqrt{\left(N_u^{2}+1\right)^{2}}\cdot\left(N_u^{2}-B+1\right)}{\sqrt{N_u^{2}\cdot\left(N_u^{2}-B+1\right)^{2}}\cdot\left(N_u^{2}+1\right)}$$

0, 2, 3: $$\frac{N_u\cdot\sqrt{C^{2}\cdot\left(N_u^{2}+1\right)^{2}}\cdot\left(N_u^{2}-B+1\right)}{C\cdot\sqrt{N_u^{2}\cdot\left(N_u^{2}-B+1\right)^{2}}\cdot\left(N_u^{2}+1\right)}$$

1, 2, 0: $$\frac{N_u\cdot\sqrt{\left(A^{2}+N_u^{2}\right)^{2}}\cdot\left(A^{2}-B\cdot A+N_u^{2}\right)}{\sqrt{N_u^{2}\cdot\left(A^{2}-B\cdot A+N_u^{2}\right)^{2}}\cdot\left(A^{2}+N_u^{2}\right)}$$

1, 2, 3: $$\frac{N_u\cdot\sqrt{C^{2}\cdot\left(A^{2}+N_u^{2}\right)^{2}}\cdot\left(A^{2}-B\cdot A+N_u^{2}\right)}{C\cdot\sqrt{N_u^{2}\cdot\left(A^{2}-B\cdot A+N_u^{2}\right)^{2}}\cdot\left(A^{2}+N_u^{2}\right)}$$

2SMT3R8



Unit. $AB := 1$ Given. $N_1 := 2.60606$ $N_2 := 1.82828$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$\frac{B}{\sqrt{A \cdot B}} = 1.193908$ $Num := \frac{B}{\sqrt{(B)^2}}$ $Den := \frac{\sqrt{A \cdot B}}{\sqrt{\left(\sqrt{A \cdot B}\right)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{B}{\sqrt{B^2}} = 0$

For 2 variables there are 4 subsets.

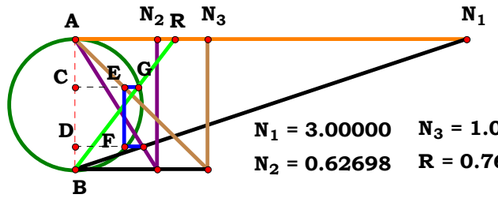
0, 0: 1

1, 0: 1

0, 2: $\frac{B}{\sqrt{B^2}}$

1, 2: $\frac{B}{\sqrt{B^2}}$

2SMT3R9



$N_1 = 3.00000$ $N_3 = 1.01914$
$N_2 = 0.62698$ $R = 0.76805$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := .62698$ $N_3 := 1.01914$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A \cdot B \cdot C \cdot \sqrt{A \cdot B \cdot \left[N_u \cdot (A+B) - C \cdot \sqrt{A \cdot B}\right]}}{\left[\sqrt{A \cdot B} \cdot N_u \cdot (A+B) - A \cdot B \cdot C\right] \cdot \sqrt{A \cdot B \cdot C \cdot \sqrt{A \cdot B}}} = 0.768049$$

$$Num := \frac{A \cdot B \cdot C \cdot \sqrt{A \cdot B \cdot \left[N_u \cdot (A+B) - C \cdot \sqrt{A \cdot B}\right]}}{\sqrt{\left[A \cdot B \cdot C \cdot \sqrt{A \cdot B \cdot \left[N_u \cdot (A+B) - C \cdot \sqrt{A \cdot B}\right]}\right]^2}}$$

$$Den := \frac{\left[\sqrt{A \cdot B} \cdot N_u \cdot (A+B) - A \cdot B \cdot C\right] \cdot \sqrt{A \cdot B \cdot C \cdot \sqrt{A \cdot B}}}{\sqrt{\left[\left[\sqrt{A \cdot B} \cdot N_u \cdot (A+B) - A \cdot B \cdot C\right] \cdot \sqrt{A \cdot B \cdot C \cdot \sqrt{A \cdot B}}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot B \cdot C \cdot \sqrt{A \cdot B \cdot \left[N_u \cdot (A+B) - C \cdot \sqrt{A \cdot B}\right]} \cdot \sqrt{A \cdot B \cdot C \cdot \left[N_u \cdot \sqrt{A \cdot B} \cdot (A+B) - A \cdot B \cdot C\right]^2 \cdot \sqrt{A \cdot B}}}{\left(A \cdot N_u \cdot \sqrt{A \cdot B} - A \cdot B \cdot C + B \cdot N_u \cdot \sqrt{A \cdot B}\right) \cdot \sqrt{A \cdot B \cdot C \cdot \sqrt{A \cdot B}} \cdot \sqrt{A^3 \cdot B^3 \cdot C^2 \cdot \left[N_u \cdot (A+B) - C \cdot \sqrt{A \cdot B}\right]}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{\sqrt{\left(2\cdot N_u-1\right)^2}}{2\cdot N_u-1}$$

1, 0, 0: $$\frac{A\cdot\sqrt{A^{\frac{3}{2}}\cdot\left[A-\sqrt{A}\cdot N_u\cdot(A+1)\right]^2}\cdot\sqrt{-A\cdot\left[\sqrt{A}-N_u\cdot(A+1)\right]}}{\sqrt{A^{\frac{3}{2}}\cdot\sqrt{-A^3\cdot\left[\sqrt{A}-N_u\cdot(A+1)\right]}}\cdot\left(\sqrt{A}\cdot N_u-A+A^{\frac{3}{2}}\cdot N_u\right)}$$

0, 2, 0: $$\frac{B\cdot\sqrt{B^{\frac{3}{2}}\cdot\left[B-\sqrt{B}\cdot N_u\cdot(B+1)\right]^2}\cdot\sqrt{-B\cdot\left[\sqrt{B}-N_u\cdot(B+1)\right]}}{\sqrt{B^{\frac{3}{2}}\cdot\sqrt{-B^3\cdot\left[\sqrt{B}-N_u\cdot(B+1)\right]}}\cdot\left(\sqrt{B}\cdot N_u-B+B^{\frac{3}{2}}\cdot N_u\right)}$$

1, 2, 0: $$\frac{A\cdot B\cdot\sqrt{A\cdot B\cdot\left[N_u\cdot(A+B)-\sqrt{A\cdot B}\right]}\cdot\sqrt{A\cdot B\cdot\left[A\cdot B-N_u\cdot\sqrt{A\cdot B}\cdot(A+B)\right]^2}\cdot\sqrt{A\cdot B}}{\sqrt{A^3\cdot B^3\cdot\left[N_u\cdot(A+B)-\sqrt{A\cdot B}\right]}\cdot\left(A\cdot N_u\cdot\sqrt{A\cdot B}-A\cdot B+B\cdot N_u\cdot\sqrt{A\cdot B}\right)\cdot\sqrt{A\cdot B\cdot\sqrt{A\cdot B}}}$$

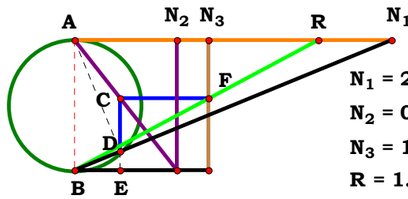
0, 0, 3: $$\frac{\sqrt{C}\cdot\sqrt{C\cdot\left(C-2\cdot N_u\right)^2}}{\sqrt{-C^2\cdot\left(C-2\cdot N_u\right)}\cdot\sqrt{2\cdot N_u-C}}$$

1, 0, 3: $$\frac{A\cdot C\cdot\sqrt{-A\cdot\left[\sqrt{A}\cdot C-N_u\cdot(A+1)\right]}\cdot\sqrt{A^{\frac{3}{2}}\cdot C\cdot\left[A\cdot C-\sqrt{A}\cdot N_u\cdot(A+1)\right]^2}}{\sqrt{A^{\frac{3}{2}}\cdot C}\cdot\sqrt{-A^3\cdot C^2\cdot\left[\sqrt{A}\cdot C-N_u\cdot(A+1)\right]}\cdot\left(\sqrt{A}\cdot N_u-A\cdot C+A^{\frac{3}{2}}\cdot N_u\right)}$$

0, 2, 3: $$\frac{B\cdot C\cdot\sqrt{-B\cdot\left[\sqrt{B}\cdot C-N_u\cdot(B+1)\right]}\cdot\sqrt{B^{\frac{3}{2}}\cdot C\cdot\left[B\cdot C-\sqrt{B}\cdot N_u\cdot(B+1)\right]^2}}{\sqrt{B^{\frac{3}{2}}\cdot C}\cdot\sqrt{-B^3\cdot C^2\cdot\left[\sqrt{B}\cdot C-N_u\cdot(B+1)\right]}\cdot\left(\sqrt{B}\cdot N_u-B\cdot C+B^{\frac{3}{2}}\cdot N_u\right)}$$

1, 2, 3: $$\frac{A\cdot B\cdot C\cdot\sqrt{A\cdot B\cdot\left[N_u\cdot(A+B)-C\cdot\sqrt{A\cdot B}\right]}\cdot\sqrt{A\cdot B\cdot C\cdot\left[N_u\cdot\sqrt{A\cdot B}\cdot(A+B)-A\cdot B\cdot C\right]^2}\cdot\sqrt{A\cdot B}}{\left(A\cdot N_u\cdot\sqrt{A\cdot B}-A\cdot B\cdot C+B\cdot N_u\cdot\sqrt{A\cdot B}\right)\cdot\sqrt{A\cdot B\cdot C\cdot\sqrt{A\cdot B}}\cdot\sqrt{A^3\cdot B^3\cdot C^2\cdot\left[N_u\cdot(A+B)-C\cdot\sqrt{A\cdot B}\right]}}$$

2SMT3R10



$N_1 = 2.42854$
$N_2 = 0.78196$
$N_3 = 1.02883$
$R = 1.87144$

Unit. $AB := 1$ Given. $N_1 := 2.42854$ $N_2 := .78196$ $N_3 := 1.02883$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u^2\right)}{C \cdot \left(A^2 - B \cdot A + N_u^2\right)} = 1.871437$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u^2\right)\right]^2}}$$

$$Den := \frac{C \cdot \left(A^2 - B \cdot A + N_u^2\right)}{\sqrt{\left[C \cdot \left(A^2 - B \cdot A + N_u^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{C^2 \cdot \left(A^2 - B \cdot A + N_u^2\right)^2} \cdot \left(A^2 + N_u^2\right)}{C \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2} \cdot \left(A^2 - B \cdot A + N_u^2\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{\sqrt{N_u^4}\cdot\left(N_u^2+1\right)}{N_u\cdot\sqrt{N_u^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 0:

$$\frac{N_u\cdot\left(A^2+N_u^2\right)\cdot\sqrt{\left(A^2-A+N_u^2\right)^2}}{\sqrt{N_u^2\cdot\left(A^2+N_u^2\right)^2}\cdot\left(A^2-A+N_u^2\right)}$$

0, 2, 0:

$$\frac{N_u\cdot\left(N_u^2+1\right)\cdot\sqrt{\left(N_u^2-B+1\right)^2}}{\sqrt{N_u^2\cdot\left(N_u^2+1\right)^2}\cdot\left(N_u^2-B+1\right)}$$

1, 2, 0:

$$\frac{N_u\cdot\left(A^2+N_u^2\right)\cdot\sqrt{\left(A^2-B\cdot A+N_u^2\right)^2}}{\sqrt{N_u^2\cdot\left(A^2+N_u^2\right)^2}\cdot\left(A^2-B\cdot A+N_u^2\right)}$$

0, 0, 3:

$$\frac{\sqrt{C^2\cdot N_u^4}\cdot\left(N_u^2+1\right)}{C\cdot N_u\cdot\sqrt{N_u^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 3:

$$\frac{N_u\cdot\left(A^2+N_u^2\right)\cdot\sqrt{C^2\cdot\left(A^2-A+N_u^2\right)^2}}{C\cdot\sqrt{N_u^2\cdot\left(A^2+N_u^2\right)^2}\cdot\left(A^2-A+N_u^2\right)}$$

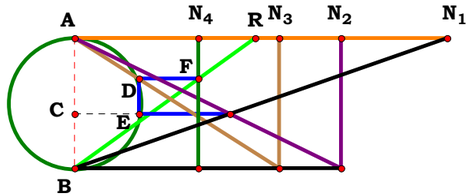
0, 2, 3:

$$\frac{N_u\cdot\sqrt{C^2\cdot\left(N_u^2-B+1\right)^2}\cdot\left(N_u^2+1\right)}{C\cdot\sqrt{N_u^2\cdot\left(N_u^2+1\right)^2}\cdot\left(N_u^2-B+1\right)}$$

1, 2, 3:

$$\frac{N_u\cdot\sqrt{C^2\cdot\left(A^2-B\cdot A+N_u^2\right)^2}\cdot\left(A^2+N_u^2\right)}{C\cdot\sqrt{N_u^2\cdot\left(A^2+N_u^2\right)^2}\cdot\left(A^2-B\cdot A+N_u^2\right)}$$

2SMT3R11



$N_1 = 2.85471$
$N_2 = 2.04111$
$N_3 = 1.57123$
$N_4 = 0.94898$
$R = 1.38294$

Unit. $AB := 1$ Given. $N_1 := 2.85471$ $N_2 := 2.04111$ $N_3 := 1.57123$

$N_4 := .94898$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^{\,2}\cdot(A+B)\cdot\sqrt{A\cdot B}}{D\cdot\left[\sqrt{A\cdot B}\cdot N_u\cdot(A+B)-A\cdot B\cdot C\right]} = 1.382944$$

$$Num := \frac{N_u^{\,2}\cdot(A+B)\cdot\sqrt{A\cdot B}}{\sqrt{\left[N_u^{\,2}\cdot(A+B)\cdot\sqrt{A\cdot B}\right]^2}}$$

$$Den := \frac{D\cdot\left[\sqrt{A\cdot B}\cdot N_u\cdot(A+B)-A\cdot B\cdot C\right]}{\sqrt{\left[D\cdot\left[\sqrt{A\cdot B}\cdot N_u\cdot(A+B)-A\cdot B\cdot C\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^{\,2}\cdot\sqrt{A\cdot B}\cdot(A+B)\cdot\sqrt{D^2\cdot\left[N_u\cdot\sqrt{A\cdot B}\cdot(A+B)-A\cdot B\cdot C\right]^2}}{D\cdot\left(A\cdot N_u\cdot\sqrt{A\cdot B}-A\cdot B\cdot C+B\cdot N_u\cdot\sqrt{A\cdot B}\right)\cdot\sqrt{A\cdot B\cdot N_u^{\,4}\cdot(A+B)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(2\cdot N_u-1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(2\cdot N_u-1\right)}$$

1, 0, 0, 0:

$$\frac{\sqrt{A}\cdot N_u^{\,2}\cdot(A+1)\cdot\sqrt{\left[A-\sqrt{A}\cdot N_u\cdot(A+1)\right]^2}}{\sqrt{A\cdot N_u^{\,4}\cdot(A+1)^2}\cdot\left(\sqrt{A}\cdot N_u-A+A^{\frac{3}{2}}\cdot N_u\right)}$$

0, 2, 0, 0:

$$\frac{\sqrt{B}\cdot N_u^{\,2}\cdot(B+1)\cdot\sqrt{\left[B-\sqrt{B}\cdot N_u\cdot(B+1)\right]^2}}{\sqrt{B\cdot N_u^{\,4}\cdot(B+1)^2}\cdot\left(\sqrt{B}\cdot N_u-B+B^{\frac{3}{2}}\cdot N_u\right)}$$

1, 2, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{A\cdot B}\cdot(A+B)\cdot\sqrt{\left[A\cdot B-N_u\cdot\sqrt{A\cdot B}\cdot(A+B)\right]^2}}{\left(A\cdot N_u\cdot\sqrt{A\cdot B}-A\cdot B+B\cdot N_u\cdot\sqrt{A\cdot B}\right)\cdot\sqrt{A\cdot B\cdot N_u^{\,4}\cdot(A+B)^2}}$$

0, 0, 3, 0:

$$-\frac{N_u^{\,2}\cdot\sqrt{\left(C-2\cdot N_u\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(C-2\cdot N_u\right)}$$

1, 0, 3, 0:

$$\frac{\sqrt{A}\cdot N_u^{\,2}\cdot(A+1)\cdot\sqrt{\left[A\cdot C-\sqrt{A}\cdot N_u\cdot(A+1)\right]^2}}{\sqrt{A\cdot N_u^{\,4}\cdot(A+1)^2}\cdot\left(\sqrt{A}\cdot N_u-A\cdot C+A^{\frac{3}{2}}\cdot N_u\right)}$$

0, 2, 3, 0:

$$\frac{\sqrt{B}\cdot N_u^{\,2}\cdot(B+1)\cdot\sqrt{\left[B\cdot C-\sqrt{B}\cdot N_u\cdot(B+1)\right]^2}}{\sqrt{B\cdot N_u^{\,4}\cdot(B+1)^2}\cdot\left(\sqrt{B}\cdot N_u-B\cdot C+B^{\frac{3}{2}}\cdot N_u\right)}$$

1, 2, 3, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{A\cdot B}\cdot(A+B)\cdot\sqrt{\left[N_u\cdot\sqrt{A\cdot B}\cdot(A+B)-A\cdot B\cdot C\right]^2}}{\left(A\cdot N_u\cdot\sqrt{A\cdot B}-A\cdot B\cdot C+B\cdot N_u\cdot\sqrt{A\cdot B}\right)\cdot\sqrt{A\cdot B\cdot N_u^{\,4}\cdot(A+B)^2}}$$

0, 0, 0, 4: $$\frac{N_u^{\,2}\cdot\sqrt{D^2\cdot\left(2\cdot N_u-1\right)^2}}{D\cdot\sqrt{N_u^{\,4}}\cdot\left(2\cdot N_u-1\right)}$$

1, 0, 0, 4: $$\frac{\sqrt{A}\cdot N_u^{\,2}\cdot\sqrt{D^2\cdot\left[A-\sqrt{A}\cdot N_u\cdot(A+1)\right]^2}\cdot(A+1)}{D\cdot\sqrt{A\cdot N_u^{\,4}\cdot(A+1)^2}\cdot\left(\sqrt{A}\cdot N_u-A+A^{\frac{3}{2}}\cdot N_u\right)}$$

0, 2, 0, 4: $$\frac{\sqrt{B}\cdot N_u^{\,2}\cdot\sqrt{D^2\cdot\left[B-\sqrt{B}\cdot N_u\cdot(B+1)\right]^2}\cdot(B+1)}{D\cdot\sqrt{B\cdot N_u^{\,4}\cdot(B+1)^2}\cdot\left(\sqrt{B}\cdot N_u-B+B^{\frac{3}{2}}\cdot N_u\right)}$$

1, 2, 0, 4: $$\frac{N_u^{\,2}\cdot\sqrt{A\cdot B}\cdot(A+B)\cdot\sqrt{D^2\cdot\left[A\cdot B-N_u\cdot\sqrt{A\cdot B}\cdot(A+B)\right]^2}}{D\cdot\left(A\cdot N_u\cdot\sqrt{A\cdot B}-A\cdot B+B\cdot N_u\cdot\sqrt{A\cdot B}\right)\cdot\sqrt{A\cdot B\cdot N_u^{\,4}\cdot(A+B)^2}}$$

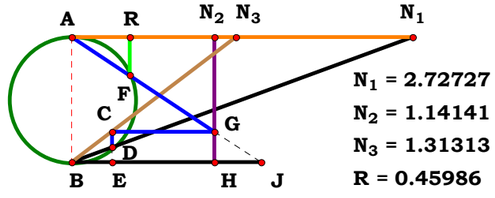
0, 0, 3, 4: $$-\frac{N_u^{\,2}\cdot\sqrt{D^2\cdot\left(C-2\cdot N_u\right)^2}}{D\cdot\sqrt{N_u^{\,4}}\cdot\left(C-2\cdot N_u\right)}$$

1, 0, 3, 4: $$\frac{\sqrt{A}\cdot N_u^{\,2}\cdot(A+1)\cdot\sqrt{D^2\cdot\left[A\cdot C-\sqrt{A}\cdot N_u\cdot(A+1)\right]^2}}{D\cdot\sqrt{A\cdot N_u^{\,4}\cdot(A+1)^2}\cdot\left(\sqrt{A}\cdot N_u-A\cdot C+A^{\frac{3}{2}}\cdot N_u\right)}$$

0, 2, 3, 4: $$\frac{\sqrt{B}\cdot N_u^{\,2}\cdot(B+1)\cdot\sqrt{D^2\cdot\left[B\cdot C-\sqrt{B}\cdot N_u\cdot(B+1)\right]^2}}{D\cdot\sqrt{B\cdot N_u^{\,4}\cdot(B+1)^2}\cdot\left(\sqrt{B}\cdot N_u-B\cdot C+B^{\frac{3}{2}}\cdot N_u\right)}$$

1, 2, 3, 4: $$\frac{N_u^{\,2}\cdot\sqrt{A\cdot B}\cdot(A+B)\cdot\sqrt{D^2\cdot\left[N_u\cdot\sqrt{A\cdot B}\cdot(A+B)-A\cdot B\cdot C\right]^2}}{D\cdot\left(A\cdot N_u\cdot\sqrt{A\cdot B}-A\cdot B\cdot C+B\cdot N_u\cdot\sqrt{A\cdot B}\right)\cdot\sqrt{A\cdot B\cdot N_u^{\,4}\cdot(A+B)^2}}$$

2SMT4R0



Unit. $AB := 1$ **Given.** $N_1 := 2.72727$ $N_2 := 1.14141$ $N_3 := 1.31313$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(A^2 + {N_u}^2\right) \cdot \left(A^2 - C \cdot A + {N_u}^2\right)}{{N_u}^6 + {N_u}^4 \cdot \left(2 \cdot A^2 + B^2\right) + A \cdot {N_u}^2 \cdot \left(A^3 + 2 \cdot A \cdot B^2 - 2 \cdot C \cdot B^2\right) + A^2 \cdot B^2 \cdot (A - C)^2} = 0.459865$$

$$Num := \frac{B \cdot N_u \cdot \left(A^2 + {N_u}^2\right) \cdot \left(A^2 - C \cdot A + {N_u}^2\right)}{\sqrt{\left[B \cdot N_u \cdot \left(A^2 + {N_u}^2\right) \cdot \left(A^2 - C \cdot A + {N_u}^2\right)\right]^2}} \qquad Den := \frac{{N_u}^6 + {N_u}^4 \cdot \left(2 \cdot A^2 + B^2\right) + A \cdot {N_u}^2 \cdot \left(A^3 + 2 \cdot A \cdot B^2 - 2 \cdot C \cdot B^2\right) + A^2 \cdot B^2 \cdot (A - C)^2}{\sqrt{\left[{N_u}^6 + {N_u}^4 \cdot \left(2 \cdot A^2 + B^2\right) + A \cdot {N_u}^2 \cdot \left(A^3 + 2 \cdot A \cdot B^2 - 2 \cdot C \cdot B^2\right) + A^2 \cdot B^2 \cdot (A - C)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{B \cdot N_u \cdot \left(A^2 + {N_u}^2\right) \cdot \sqrt{\left[{N_u}^4 \cdot \left(2 \cdot A^2 + B^2\right) + {N_u}^6 + A^2 \cdot B^2 \cdot (A - C)^2 + A \cdot {N_u}^2 \cdot \left(A^3 + 2 \cdot A \cdot B^2 - 2 \cdot C \cdot B^2\right)\right]^2} \cdot \left(A^2 - C \cdot A + {N_u}^2\right)}{\sqrt{B^2 \cdot {N_u}^2 \cdot \left(A^2 + {N_u}^2\right)^2 \cdot \left(A^2 - C \cdot A + {N_u}^2\right)^2} \cdot \left(A^4 \cdot B^2 + A^4 \cdot {N_u}^2 - 2 \cdot A^3 \cdot B^2 \cdot C + A^2 \cdot B^2 \cdot C^2 + 2 \cdot A^2 \cdot B^2 \cdot {N_u}^2 + 2 \cdot A^2 \cdot {N_u}^4 - 2 \cdot A \cdot B^2 \cdot C \cdot {N_u}^2 + B^2 \cdot {N_u}^4 + {N_u}^6\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u^{\,3}\cdot\sqrt{\left(N_u^{\,6}+3\cdot N_u^{\,4}+N_u^{\,2}\right)^2}\cdot\left(N_u^{\,2}+1\right)}{\sqrt{N_u^{\,6}\cdot\left(N_u^{\,2}+1\right)^2}\cdot\left(N_u^{\,6}+3\cdot N_u^{\,4}+N_u^{\,2}\right)}$$

1, 0, 0:

$$\frac{N_u\cdot\left(A^2+N_u^{\,2}\right)\cdot\sqrt{\left[N_u^{\,6}+N_u^{\,4}\cdot\left(2\cdot A^2+1\right)+A^2\cdot(A-1)^2+A\cdot N_u^{\,2}\cdot\left(A^3+2\cdot A-2\right)\right]^2}\cdot\left(A^2-A+N_u^{\,2}\right)}{\sqrt{N_u^{\,2}\cdot\left(A^2+N_u^{\,2}\right)^2\cdot\left(A^2-A+N_u^{\,2}\right)^2}\cdot\left(A^4\cdot N_u^{\,2}+A^4-2\cdot A^3+2\cdot A^2\cdot N_u^{\,4}+2\cdot A^2\cdot N_u^{\,2}+A^2-2\cdot A\cdot N_u^{\,2}+N_u^{\,6}+N_u^{\,4}\right)}$$

0, 2, 0:

$$\frac{B\cdot N_u^{\,3}\cdot\sqrt{\left[N_u^{\,6}+\left(B^2+2\right)\cdot N_u^{\,4}+N_u^{\,2}\right]^2}\cdot\left(N_u^{\,2}+1\right)}{\sqrt{B^2\cdot N_u^{\,6}\cdot\left(N_u^{\,2}+1\right)^2}\cdot\left(B^2\cdot N_u^{\,4}+N_u^{\,6}+2\cdot N_u^{\,4}+N_u^{\,2}\right)}$$

1, 2, 0:

$$\frac{B\cdot N_u\cdot\left(A^2+N_u^{\,2}\right)\cdot\sqrt{\left[N_u^{\,4}\cdot\left(2\cdot A^2+B^2\right)+N_u^{\,6}+A^2\cdot B^2\cdot(A-1)^2+A\cdot N_u^{\,2}\cdot\left(A^3+2\cdot A\cdot B^2-2\cdot B^2\right)\right]^2}\cdot\left(A^2-A+N_u^{\,2}\right)}{\sqrt{B^2\cdot N_u^{\,2}\cdot\left(A^2+N_u^{\,2}\right)^2\cdot\left(A^2-A+N_u^{\,2}\right)^2}\cdot\left(A^4\cdot B^2+A^4\cdot N_u^{\,2}-2\cdot A^3\cdot B^2+2\cdot A^2\cdot B^2\cdot N_u^{\,2}+A^2\cdot B^2+2\cdot A^2\cdot N_u^{\,4}-2\cdot A\cdot B^2\cdot N_u^{\,2}+B^2\cdot N_u^{\,4}+N_u^{\,6}\right)}$$

0, 0, 3:

$$\frac{N_u\cdot\left(N_u^{\,2}+1\right)\cdot\sqrt{\left[3\cdot N_u^{\,4}+N_u^{\,6}+(C-1)^2-N_u^{\,2}\cdot(2\cdot C-3)\right]^2}\cdot\left(N_u^{\,2}-C+1\right)}{\sqrt{N_u^{\,2}\cdot\left(N_u^{\,2}+1\right)^2\cdot\left(N_u^{\,2}-C+1\right)^2}\cdot\left(C^2-2\cdot C\cdot N_u^{\,2}-2\cdot C+N_u^{\,6}+3\cdot N_u^{\,4}+3\cdot N_u^{\,2}+1\right)}$$

1, 0, 3:

$$\frac{N_u\cdot\sqrt{\left[N_u^{\,6}+N_u^{\,4}\cdot\left(2\cdot A^2+1\right)+A^2\cdot(A-C)^2+A\cdot N_u^{\,2}\cdot\left(A^3+2\cdot A-2\cdot C\right)\right]^2}\cdot\left(A^2+N_u^{\,2}\right)\cdot\left(A^2-C\cdot A+N_u^{\,2}\right)}{\sqrt{N_u^{\,2}\cdot\left(A^2+N_u^{\,2}\right)^2\cdot\left(A^2-C\cdot A+N_u^{\,2}\right)^2}\cdot\left(A^4\cdot N_u^{\,2}+A^4-2\cdot A^3\cdot C+A^2\cdot C^2+2\cdot A^2\cdot N_u^{\,4}+2\cdot A^2\cdot N_u^{\,2}-2\cdot A\cdot C\cdot N_u^{\,2}+N_u^{\,6}+N_u^{\,4}\right)}$$

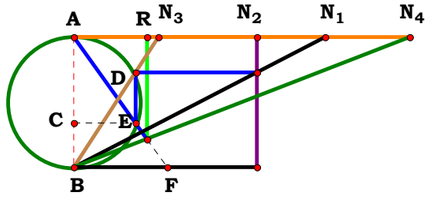
0, 2, 3:

$$\frac{B\cdot N_u\cdot\sqrt{\left[N_u^{\,6}+N_u^{\,2}\cdot\left(2\cdot B^2-2\cdot B^2\cdot C+1\right)+B^2\cdot(C-1)^2+N_u^{\,4}\cdot\left(B^2+2\right)\right]^2}\cdot\left(N_u^{\,2}+1\right)\cdot\left(N_u^{\,2}-C+1\right)}{\sqrt{B^2\cdot N_u^{\,2}\cdot\left(N_u^{\,2}+1\right)^2\cdot\left(N_u^{\,2}-C+1\right)^2}\cdot\left(B^2\cdot C^2-2\cdot B^2\cdot C\cdot N_u^{\,2}-2\cdot B^2\cdot C+B^2\cdot N_u^{\,4}+2\cdot B^2\cdot N_u^{\,2}+B^2+N_u^{\,6}+2\cdot N_u^{\,4}+N_u^{\,2}\right)}$$

1, 2, 3:

$$\frac{B\cdot N_u\cdot\left(A^2+N_u^{\,2}\right)\cdot\sqrt{\left[N_u^{\,4}\cdot\left(2\cdot A^2+B^2\right)+N_u^{\,6}+A^2\cdot B^2\cdot(A-C)^2+A\cdot N_u^{\,2}\cdot\left(A^3+2\cdot A\cdot B^2-2\cdot C\cdot B^2\right)\right]^2}\cdot\left(A^2-C\cdot A+N_u^{\,2}\right)}{\sqrt{B^2\cdot N_u^{\,2}\cdot\left(A^2+N_u^{\,2}\right)^2\cdot\left(A^2-C\cdot A+N_u^{\,2}\right)^2}\cdot\left(A^4\cdot B^2+A^4\cdot N_u^{\,2}-2\cdot A^3\cdot B^2\cdot C+A^2\cdot B^2\cdot C^2+2\cdot A^2\cdot B^2\cdot N_u^{\,2}+2\cdot A^2\cdot N_u^{\,4}-2\cdot A\cdot B^2\cdot C\cdot N_u^{\,2}+B^2\cdot N_u^{\,4}+N_u^{\,6}\right)}$$

2SMT4R1



$N_1 = 1.92488$
$N_2 = 1.40185$
$N_3 = 0.65108$
$N_4 = 2.57619$
R = 0.56269

Unit. $AB := 1$ Given. $N_1 := 1.92488$ $N_2 := 1.40185$ $N_3 := .65108$ $N_4 := 2.57619$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2 \cdot A \cdot N_u^2}{\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + N_u \cdot (2 \cdot A \cdot D + B \cdot C)} = 0.562683$$

$$Num := \frac{2 \cdot A \cdot N_u^2}{\sqrt{\left(2 \cdot A \cdot N_u^2\right)^2}}$$

$$Den := \frac{\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + N_u \cdot (2 \cdot A \cdot D + B \cdot C)}{\sqrt{\left[\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + N_u \cdot (2 \cdot A \cdot D + B \cdot C)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u^2 \cdot \sqrt{\left[\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + N_u \cdot (2 \cdot A \cdot D + B \cdot C)\right]^2}}{\sqrt{A^2 \cdot N_u^4} \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + 2 \cdot A \cdot D \cdot N_u + B \cdot C \cdot N_u\right)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(3\cdot N_u+\sqrt{N_u^{\,2}-4\cdot N_u^{\,4}}\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(3\cdot N_u+\sqrt{N_u^{\,2}-4\cdot N_u^{\,4}}\right)}$$

1, 0, 0, 0:

$$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left[\sqrt{N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+N_u\cdot(2\cdot A+1)\right]^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(N_u+\sqrt{N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+2\cdot A\cdot N_u\right)}$$

0, 2, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left[\sqrt{B^2\cdot N_u^{\,2}-4\cdot N_u^{\,4}}+N_u\cdot(B+2)\right]^2}}{\sqrt{N_u^{\,4}}\cdot\left(2\cdot N_u+B\cdot N_u+\sqrt{B^2\cdot N_u^{\,2}-4\cdot N_u^{\,4}}\right)}$$

1, 2, 0, 0:

$$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left[\sqrt{B^2\cdot N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+N_u\cdot(2\cdot A+B)\right]^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(\sqrt{B^2\cdot N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+2\cdot A\cdot N_u+B\cdot N_u\right)}$$

0, 0, 3, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left[\sqrt{C^2\cdot N_u^{\,2}-4\cdot N_u^{\,4}}+N_u\cdot(C+2)\right]^2}}{\sqrt{N_u^{\,4}}\cdot\left(2\cdot N_u+C\cdot N_u+\sqrt{C^2\cdot N_u^{\,2}-4\cdot N_u^{\,4}}\right)}$$

1, 0, 3, 0:

$$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left[\sqrt{C^2\cdot N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+N_u\cdot(2\cdot A+C)\right]^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(\sqrt{C^2\cdot N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+2\cdot A\cdot N_u+C\cdot N_u\right)}$$

0, 2, 3, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left[\sqrt{B^2\cdot C^2\cdot N_u^{\,2}-4\cdot N_u^{\,4}}+N_u\cdot(B\cdot C+2)\right]^2}}{\sqrt{N_u^{\,4}}\cdot\left(2\cdot N_u+\sqrt{B^2\cdot C^2\cdot N_u^{\,2}-4\cdot N_u^{\,4}}+B\cdot C\cdot N_u\right)}$$

1, 2, 3, 0:

$$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left[\sqrt{B^2\cdot C^2\cdot N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+N_u\cdot(2\cdot A+B\cdot C)\right]^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(\sqrt{B^2\cdot C^2\cdot N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+2\cdot A\cdot N_u+B\cdot C\cdot N_u\right)}$$

0, 0, 0, 4:

$$\frac{N_u^{\,2}\cdot\sqrt{\left[N_u\cdot(2\cdot D+1)+\sqrt{N_u^{\,2}-4\cdot N_u^{\,4}}\right]^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u+\sqrt{N_u^{\,2}-4\cdot N_u^{\,4}}+2\cdot D\cdot N_u\right)}$$

1, 0, 0, 4:

$$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left[\sqrt{N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+N_u\cdot(2\cdot A\cdot D+1)\right]^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(N_u+\sqrt{N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+2\cdot A\cdot D\cdot N_u\right)}$$

0, 2, 0, 4:

$$\frac{N_u^{\,2}\cdot\sqrt{\left[\sqrt{B^2\cdot N_u^{\,2}-4\cdot N_u^{\,4}}+N_u\cdot(B+2\cdot D)\right]^2}}{\sqrt{N_u^{\,4}}\cdot\left(B\cdot N_u+2\cdot D\cdot N_u+\sqrt{B^2\cdot N_u^{\,2}-4\cdot N_u^{\,4}}\right)}$$

1, 2, 0, 4:

$$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left[\sqrt{B^2\cdot N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+N_u\cdot(B+2\cdot A\cdot D)\right]^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(\sqrt{B^2\cdot N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+B\cdot N_u+2\cdot A\cdot D\cdot N_u\right)}$$

0, 0, 3, 4:

$$\frac{N_u^{\,2}\cdot\sqrt{\left[\sqrt{C^2\cdot N_u^{\,2}-4\cdot N_u^{\,4}}+N_u\cdot(C+2\cdot D)\right]^2}}{\sqrt{N_u^{\,4}}\cdot\left(C\cdot N_u+2\cdot D\cdot N_u+\sqrt{C^2\cdot N_u^{\,2}-4\cdot N_u^{\,4}}\right)}$$

1, 0, 3, 4:

$$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left[\sqrt{C^2\cdot N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+N_u\cdot(C+2\cdot A\cdot D)\right]^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(\sqrt{C^2\cdot N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+C\cdot N_u+2\cdot A\cdot D\cdot N_u\right)}$$

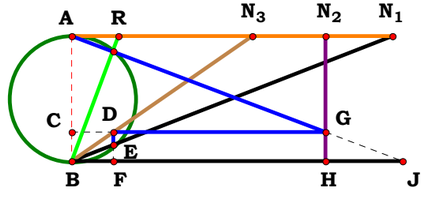
0, 2, 3, 4:

$$\frac{N_u^{\,2}\cdot\sqrt{\left[\sqrt{B^2\cdot C^2\cdot N_u^{\,2}-4\cdot N_u^{\,4}}+N_u\cdot(2\cdot D+B\cdot C)\right]^2}}{\sqrt{N_u^{\,4}}\cdot\left(\sqrt{B^2\cdot C^2\cdot N_u^{\,2}-4\cdot N_u^{\,4}}+2\cdot D\cdot N_u+B\cdot C\cdot N_u\right)}$$

1, 2, 3, 4:

$$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left[\sqrt{B^2\cdot C^2\cdot N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+N_u\cdot(2\cdot A\cdot D+B\cdot C)\right]^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(\sqrt{B^2\cdot C^2\cdot N_u^{\,2}-4\cdot A^2\cdot N_u^{\,4}}+2\cdot A\cdot D\cdot N_u+B\cdot C\cdot N_u\right)}$$

2SMT4R2



$N_1 = 2.56566$
$N_2 = 2.03030$
$N_3 = 1.44444$
$R = 0.37716$

Unit. $AB := 1$ Given. $N_1 := 2.56566$ $N_2 := 2.03030$ $N_3 := 1.44444$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{B\cdot\left(A^2 - C\cdot A + N_u{}^2\right)}{A^2\cdot N_u + N_u{}^3} = 0.377161$$

$$Num := \frac{B\cdot\left(A^2 - C\cdot A + N_u{}^2\right)}{\sqrt{\left[B\cdot\left(A^2 - C\cdot A + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{A^2\cdot N_u + N_u{}^3}{\sqrt{\left(A^2\cdot N_u + N_u{}^3\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B\cdot\sqrt{\left(A^2\cdot N_u + N_u{}^3\right)^2}\cdot\left(A^2 - C\cdot A + N_u{}^2\right)}{\sqrt{B^2\cdot\left(A^2 - C\cdot A + N_u{}^2\right)^2}\cdot N_u\cdot\left(A^2 + N_u{}^2\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u \cdot \sqrt{\left(N_u{}^3 + N_u\right)^2}}{\sqrt{N_u{}^4} \cdot \left(N_u{}^2 + 1\right)}$$

1, 0, 0: $$\frac{\sqrt{\left(A^2 \cdot N_u + N_u{}^3\right)^2} \cdot \left(A^2 - A + N_u{}^2\right)}{N_u \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{\left(A^2 - A + N_u{}^2\right)^2}}$$

0, 2, 0: $$\frac{B \cdot N_u \cdot \sqrt{\left(N_u{}^3 + N_u\right)^2}}{\sqrt{B^2 \cdot N_u{}^4} \cdot \left(N_u{}^2 + 1\right)}$$

1, 2, 0: $$\frac{B \cdot \sqrt{\left(A^2 \cdot N_u + N_u{}^3\right)^2} \cdot \left(A^2 - A + N_u{}^2\right)}{N_u \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{B^2 \cdot \left(A^2 - A + N_u{}^2\right)^2}}$$

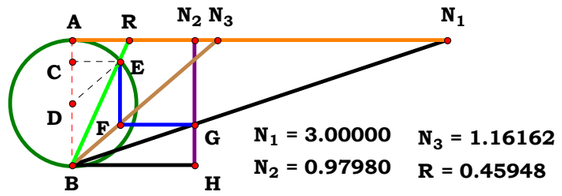
0, 0, 3: $$\frac{\sqrt{\left(N_u{}^3 + N_u\right)^2} \cdot \left(N_u{}^2 - C + 1\right)}{N_u \cdot \left(N_u{}^2 + 1\right) \cdot \sqrt{\left(N_u{}^2 - C + 1\right)^2}}$$

1, 0, 3: $$\frac{\sqrt{\left(A^2 \cdot N_u + N_u{}^3\right)^2} \cdot \left(A^2 - C \cdot A + N_u{}^2\right)}{N_u \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{\left(A^2 - C \cdot A + N_u{}^2\right)^2}}$$

0, 2, 3: $$\frac{B \cdot \sqrt{\left(N_u{}^3 + N_u\right)^2} \cdot \left(N_u{}^2 - C + 1\right)}{N_u \cdot \sqrt{B^2 \cdot \left(N_u{}^2 - C + 1\right)^2} \cdot \left(N_u{}^2 + 1\right)}$$

1, 2, 3: $$\frac{B \cdot \sqrt{\left(A^2 \cdot N_u + N_u{}^3\right)^2} \cdot \left(A^2 - C \cdot A + N_u{}^2\right)}{\sqrt{B^2 \cdot \left(A^2 - C \cdot A + N_u{}^2\right)^2} \cdot N_u \cdot \left(A^2 + N_u{}^2\right)}$$

2SMT4R3



Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := .97980$ $N_3 := 1.16162$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2 \cdot A \cdot N_u^{3}}{\sqrt{B^2 \cdot C^2 \cdot N_u^{4} - 4 \cdot A^2 \cdot N_u^{6}} + B \cdot C \cdot N_u^{2}} = 0.459482$$

$$Num := \frac{2 \cdot A \cdot N_u^{3}}{\sqrt{\left(2 \cdot A \cdot N_u^{3}\right)^2}}$$

$$Den := \frac{\sqrt{B^2 \cdot C^2 \cdot N_u^{4} - 4 \cdot A^2 \cdot N_u^{6}} + B \cdot C \cdot N_u^{2}}{\sqrt{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^{4} - 4 \cdot A^2 \cdot N_u^{6}} + B \cdot C \cdot N_u^{2}\right)^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u^{3} \cdot \sqrt{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^{4} - 4 \cdot A^2 \cdot N_u^{6}} + B \cdot C \cdot N_u^{2}\right)^2}}{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^{4} - 4 \cdot A^2 \cdot N_u^{6}} + B \cdot C \cdot N_u^{2}\right) \cdot \sqrt{A^2 \cdot N_u^{6}}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u^{3}\cdot\sqrt{\left(N_u^{2}+\sqrt{N_u^{4}-4\cdot N_u^{6}}\right)^{2}}}{\sqrt{N_u^{6}}\cdot\left(N_u^{2}+\sqrt{N_u^{4}-4\cdot N_u^{6}}\right)}$$

1, 0, 0:

$$\frac{A\cdot N_u^{3}\cdot\sqrt{\left(\sqrt{N_u^{4}-4\cdot A^{2}\cdot N_u^{6}}+N_u^{2}\right)^{2}}}{\left(\sqrt{N_u^{4}-4\cdot A^{2}\cdot N_u^{6}}+N_u^{2}\right)\cdot\sqrt{A^{2}\cdot N_u^{6}}}$$

0, 2, 0:

$$\frac{N_u^{3}\cdot\sqrt{\left(\sqrt{B^{2}\cdot N_u^{4}-4\cdot N_u^{6}}+B\cdot N_u^{2}\right)^{2}}}{\sqrt{N_u^{6}}\cdot\left(\sqrt{B^{2}\cdot N_u^{4}-4\cdot N_u^{6}}+B\cdot N_u^{2}\right)}$$

1, 2, 0:

$$\frac{A\cdot N_u^{3}\cdot\sqrt{\left(\sqrt{B^{2}\cdot N_u^{4}-4\cdot A^{2}\cdot N_u^{6}}+B\cdot N_u^{2}\right)^{2}}}{\left(\sqrt{B^{2}\cdot N_u^{4}-4\cdot A^{2}\cdot N_u^{6}}+B\cdot N_u^{2}\right)\cdot\sqrt{A^{2}\cdot N_u^{6}}}$$

0, 0, 3:

$$\frac{N_u^{3}\cdot\sqrt{\left(\sqrt{C^{2}\cdot N_u^{4}-4\cdot N_u^{6}}+C\cdot N_u^{2}\right)^{2}}}{\sqrt{N_u^{6}}\cdot\left(\sqrt{C^{2}\cdot N_u^{4}-4\cdot N_u^{6}}+C\cdot N_u^{2}\right)}$$

1, 0, 3:

$$\frac{A\cdot N_u^{3}\cdot\sqrt{\left(\sqrt{C^{2}\cdot N_u^{4}-4\cdot A^{2}\cdot N_u^{6}}+C\cdot N_u^{2}\right)^{2}}}{\left(\sqrt{C^{2}\cdot N_u^{4}-4\cdot A^{2}\cdot N_u^{6}}+C\cdot N_u^{2}\right)\cdot\sqrt{A^{2}\cdot N_u^{6}}}$$

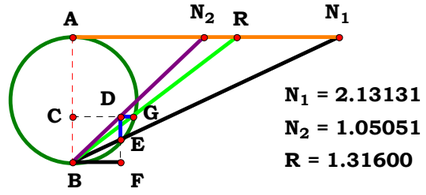
0, 2, 3:

$$\frac{N_u^{3}\cdot\sqrt{\left(\sqrt{B^{2}\cdot C^{2}\cdot N_u^{4}-4\cdot N_u^{6}}+B\cdot C\cdot N_u^{2}\right)^{2}}}{\sqrt{N_u^{6}}\cdot\left(\sqrt{B^{2}\cdot C^{2}\cdot N_u^{4}-4\cdot N_u^{6}}+B\cdot C\cdot N_u^{2}\right)}$$

1, 2, 3:

$$\frac{A\cdot N_u^{3}\cdot\sqrt{\left(\sqrt{B^{2}\cdot C^{2}\cdot N_u^{4}-4\cdot A^{2}\cdot N_u^{6}}+B\cdot C\cdot N_u^{2}\right)^{2}}}{\left(\sqrt{B^{2}\cdot C^{2}\cdot N_u^{4}-4\cdot A^{2}\cdot N_u^{6}}+B\cdot C\cdot N_u^{2}\right)\cdot\sqrt{A^{2}\cdot N_u^{6}}}$$

2SMT4R4



$N_1 = 2.13131$
$N_2 = 1.05051$
$R = 1.31600$

Unit. $AB := 1$ Given. $N_1 := 2.13131$ $N_2 := 1.05051$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A \cdot B \cdot \sqrt{A^2 - B \cdot A + N_u^2}}{\sqrt{A^3 \cdot B^3}} = 1.316$$

$$Num := \frac{A \cdot B \cdot \sqrt{A^2 - B \cdot A + N_u^2}}{\sqrt{\left(A \cdot B \cdot \sqrt{A^2 - B \cdot A + N_u^2}\right)^2}}$$

$$Den := \frac{\sqrt{A^3 \cdot B^3}}{\sqrt{\left(\sqrt{A^3 \cdot B^3}\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot B \cdot \sqrt{A^2 - B \cdot A + N_u^2}}{\sqrt{A^2 \cdot B^2 \cdot \left(A^2 - B \cdot A + N_u^2\right)}} = 0$$

For 2 variables there are 4 subsets.

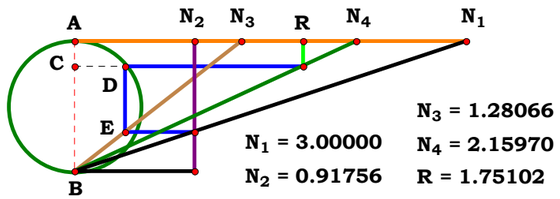
0, 0: 1

1, 0: $$\frac{A\cdot\sqrt{A^2-A+N_u{}^2}}{\sqrt{A^2\cdot\left(A^2-A+N_u{}^2\right)}}$$

0, 2: $$\frac{B\cdot\sqrt{N_u{}^2-B+1}}{\sqrt{B^2\cdot\left(N_u{}^2-B+1\right)}}$$

1, 2: $$\frac{A\cdot B\cdot\sqrt{A^2-B\cdot A+N_u{}^2}}{\sqrt{A^2\cdot B^2\cdot\left(A^2-B\cdot A+N_u{}^2\right)}}$$

2SMT4R5



$N_1 = 3.00000$ $N_3 = 1.28066$

$N_2 = 0.91756$ $N_4 = 2.15970$ $R = 1.75102$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := .91756$ $N_3 := 1.28066$

$N_4 := 2.15970$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{B^2 \cdot C^2 \cdot N_u^{\,2} - 4 \cdot A^2 \cdot N_u^{\,4}} + B \cdot C \cdot N_u}{2 \cdot D \cdot B \cdot C} = 1.751012$$

$$Num := \frac{\sqrt{B^2 \cdot C^2 \cdot N_u^{\,2} - 4 \cdot A^2 \cdot N_u^{\,4}} + B \cdot C \cdot N_u}{\sqrt{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^{\,2} - 4 \cdot A^2 \cdot N_u^{\,4}} + B \cdot C \cdot N_u\right)^2}} \qquad Den := \frac{2 \cdot D \cdot B}{\sqrt{(2 \cdot D \cdot B)^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2 \cdot D^2} \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^{\,2} - 4 \cdot A^2 \cdot N_u^{\,4}} + B \cdot C \cdot N_u\right)}{B \cdot D \cdot \sqrt{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^{\,2} - 4 \cdot A^2 \cdot N_u^{\,4}} + B \cdot C \cdot N_u\right)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:

$$\frac{N_u + \sqrt{N_u^2 - 4 \cdot N_u^4}}{\sqrt{\left(N_u + \sqrt{N_u^2 - 4 \cdot N_u^4}\right)^2}}$$

1, 0, 0, 0:

$$\frac{N_u + \sqrt{N_u^2 - 4 \cdot A^2 \cdot N_u^4}}{\sqrt{\left(N_u + \sqrt{N_u^2 - 4 \cdot A^2 \cdot N_u^4}\right)^2}}$$

0, 2, 0, 0:

$$\frac{\left(B \cdot N_u + \sqrt{B^2 \cdot N_u^2 - 4 \cdot N_u^4}\right) \cdot \sqrt{B^2}}{B \cdot \sqrt{\left(B \cdot N_u + \sqrt{B^2 \cdot N_u^2 - 4 \cdot N_u^4}\right)^2}}$$

1, 2, 0, 0:

$$\frac{\sqrt{B^2} \cdot \left(\sqrt{B^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot N_u\right)}{B \cdot \sqrt{\left(\sqrt{B^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot N_u\right)^2}}$$

0, 0, 3, 0:

$$\frac{C \cdot N_u + \sqrt{C^2 \cdot N_u^2 - 4 \cdot N_u^4}}{\sqrt{\left(C \cdot N_u + \sqrt{C^2 \cdot N_u^2 - 4 \cdot N_u^4}\right)^2}}$$

1, 0, 3, 0:

$$\frac{\sqrt{C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + C \cdot N_u}{\sqrt{\left(\sqrt{C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + C \cdot N_u\right)^2}}$$

0, 2, 3, 0:

$$\frac{\sqrt{B^2} \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot N_u^4} + B \cdot C \cdot N_u\right)}{B \cdot \sqrt{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot N_u^4} + B \cdot C \cdot N_u\right)^2}}$$

1, 2, 3, 0:

$$\frac{\sqrt{B^2} \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right)}{B \cdot \sqrt{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right)^2}}$$

0, 0, 0, 4:

$$\frac{\left(N_u + \sqrt{N_u^2 - 4 \cdot N_u^4}\right) \cdot \sqrt{D^2}}{D \cdot \sqrt{\left(N_u + \sqrt{N_u^2 - 4 \cdot N_u^4}\right)^2}}$$

1, 0, 0, 4:

$$\frac{\sqrt{D^2} \cdot \left(N_u + \sqrt{N_u^2 - 4 \cdot A^2 \cdot N_u^4}\right)}{D \cdot \sqrt{\left(N_u + \sqrt{N_u^2 - 4 \cdot A^2 \cdot N_u^4}\right)^2}}$$

0, 2, 0, 4:

$$\frac{\left(B \cdot N_u + \sqrt{B^2 \cdot N_u^2 - 4 \cdot N_u^4}\right) \cdot \sqrt{B^2 \cdot D^2}}{B \cdot D \cdot \sqrt{\left(B \cdot N_u + \sqrt{B^2 \cdot N_u^2 - 4 \cdot N_u^4}\right)^2}}$$

1, 2, 0, 4:

$$\frac{\sqrt{B^2 \cdot D^2} \cdot \left(\sqrt{B^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot N_u\right)}{B \cdot D \cdot \sqrt{\left(\sqrt{B^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot N_u\right)^2}}$$

0, 0, 3, 4:

$$\frac{\left(C \cdot N_u + \sqrt{C^2 \cdot N_u^2 - 4 \cdot N_u^4}\right) \cdot \sqrt{D^2}}{D \cdot \sqrt{\left(C \cdot N_u + \sqrt{C^2 \cdot N_u^2 - 4 \cdot N_u^4}\right)^2}}$$

1, 0, 3, 4:

$$\frac{\sqrt{D^2} \cdot \left(\sqrt{C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + C \cdot N_u\right)}{D \cdot \sqrt{\left(\sqrt{C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + C \cdot N_u\right)^2}}$$

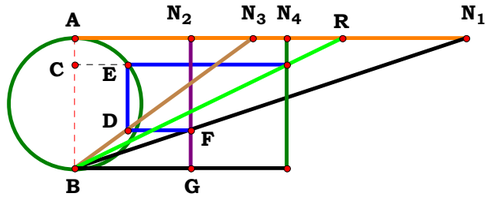
0, 2, 3, 4:

$$\frac{\sqrt{B^2 \cdot D^2} \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot N_u^4} + B \cdot C \cdot N_u\right)}{B \cdot D \cdot \sqrt{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot N_u^4} + B \cdot C \cdot N_u\right)^2}}$$

1, 2, 3, 4:

$$\frac{\sqrt{B^2 \cdot D^2} \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right)}{B \cdot D \cdot \sqrt{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right)^2}}$$

2SMT4R6



$N_1 = 3.00000$
$N_2 = 0.88850$
$N_3 = 1.36783$
$N_4 = 1.62698$
$R = 2.05150$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := .88850$ $N_3 := 1.36783$

$N_4 := 1.62698$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2 \cdot N_u^2 \cdot B \cdot C}{D \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right)} = 2.051499$$

$$Num := \frac{2 \cdot N_u^2 \cdot B \cdot C}{\sqrt{\left(2 \cdot N_u^2 \cdot B \cdot C\right)^2}}$$

$$Den := \frac{D \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right)}{\sqrt{\left[D \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot C \cdot N_u^2 \cdot \sqrt{D^2 \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right)^2}}{D \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^4}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:

$$\frac{N_u^2 \cdot \sqrt{\left(N_u + \sqrt{N_u^2 - 4 \cdot N_u^4}\right)^2}}{\left(N_u + \sqrt{N_u^2 - 4 \cdot N_u^4}\right) \cdot \sqrt{N_u^4}}$$

1, 0, 0, 0:

$$\frac{N_u^2 \cdot \sqrt{\left(N_u + \sqrt{N_u^2 - 4 \cdot A^2 \cdot N_u^4}\right)^2}}{\sqrt{N_u^4} \cdot \left(N_u + \sqrt{N_u^2 - 4 \cdot A^2 \cdot N_u^4}\right)}$$

0, 2, 0, 0:

$$\frac{B \cdot N_u^2 \cdot \sqrt{\left(B \cdot N_u + \sqrt{B^2 \cdot N_u^2 - 4 \cdot N_u^4}\right)^2}}{\left(B \cdot N_u + \sqrt{B^2 \cdot N_u^2 - 4 \cdot N_u^4}\right) \cdot \sqrt{B^2 \cdot N_u^4}}$$

1, 2, 0, 0:

$$\frac{B \cdot N_u^2 \cdot \sqrt{\left(\sqrt{B^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot N_u\right)^2}}{\sqrt{B^2 \cdot N_u^4} \cdot \left(\sqrt{B^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot N_u\right)}$$

0, 0, 3, 0:

$$\frac{C \cdot N_u^2 \cdot \sqrt{\left(C \cdot N_u + \sqrt{C^2 \cdot N_u^2 - 4 \cdot N_u^4}\right)^2}}{\left(C \cdot N_u + \sqrt{C^2 \cdot N_u^2 - 4 \cdot N_u^4}\right) \cdot \sqrt{C^2 \cdot N_u^4}}$$

1, 0, 3, 0:

$$\frac{C \cdot N_u^2 \cdot \sqrt{\left(\sqrt{C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + C \cdot N_u\right)^2}}{\sqrt{C^2 \cdot N_u^4} \cdot \left(\sqrt{C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + C \cdot N_u\right)}$$

0, 2, 3, 0:

$$\frac{B \cdot C \cdot N_u^2 \cdot \sqrt{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot N_u^4} + B \cdot C \cdot N_u\right)^2}}{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot N_u^4} + B \cdot C \cdot N_u\right) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^4}}$$

1, 2, 3, 0:

$$\frac{B \cdot C \cdot N_u^2 \cdot \sqrt{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right)^2}}{\left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^4}}$$

0, 0, 0, 4:

$$\frac{N_u^2 \cdot \sqrt{D^2 \cdot \left(N_u + \sqrt{N_u^2 - 4 \cdot N_u^4}\right)^2}}{D \cdot \left(N_u + \sqrt{N_u^2 - 4 \cdot N_u^4}\right) \cdot \sqrt{N_u^4}}$$

1, 0, 0, 4:

$$\frac{N_u^2 \cdot \sqrt{D^2 \cdot \left(N_u + \sqrt{N_u^2 - 4 \cdot A^2 \cdot N_u^4}\right)^2}}{D \cdot \sqrt{N_u^4} \cdot \left(N_u + \sqrt{N_u^2 - 4 \cdot A^2 \cdot N_u^4}\right)}$$

0, 2, 0, 4:

$$\frac{B \cdot N_u^2 \cdot \sqrt{D^2 \cdot \left(B \cdot N_u + \sqrt{B^2 \cdot N_u^2 - 4 \cdot N_u^4}\right)^2}}{D \cdot \left(B \cdot N_u + \sqrt{B^2 \cdot N_u^2 - 4 \cdot N_u^4}\right) \cdot \sqrt{B^2 \cdot N_u^4}}$$

1, 2, 0, 4:

$$\frac{B \cdot N_u^2 \cdot \sqrt{D^2 \cdot \left(\sqrt{B^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot N_u\right)^2}}{D \cdot \sqrt{B^2 \cdot N_u^4} \cdot \left(\sqrt{B^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot N_u\right)}$$

0, 0, 3, 4:

$$\frac{C \cdot N_u^2 \cdot \sqrt{D^2 \cdot \left(C \cdot N_u + \sqrt{C^2 \cdot N_u^2 - 4 \cdot N_u^4}\right)^2}}{D \cdot \left(C \cdot N_u + \sqrt{C^2 \cdot N_u^2 - 4 \cdot N_u^4}\right) \cdot \sqrt{C^2 \cdot N_u^4}}$$

1, 0, 3, 4:

$$\frac{C \cdot N_u^2 \cdot \sqrt{D^2 \cdot \left(\sqrt{C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + C \cdot N_u\right)^2}}{D \cdot \sqrt{C^2 \cdot N_u^4} \cdot \left(\sqrt{C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + C \cdot N_u\right)}$$

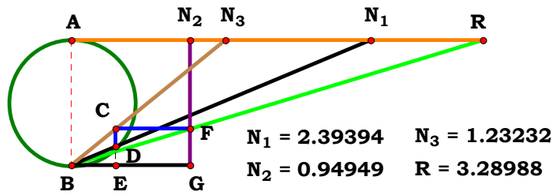
0, 2, 3, 4:

$$\frac{B \cdot C \cdot N_u^2 \cdot \sqrt{D^2 \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot N_u^4} + B \cdot C \cdot N_u\right)^2}}{D \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot N_u^4} + B \cdot C \cdot N_u\right) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^4}}$$

1, 2, 3, 4:

$$\frac{B \cdot C \cdot N_u^2 \cdot \sqrt{D^2 \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right)^2}}{D \cdot \left(\sqrt{B^2 \cdot C^2 \cdot N_u^2 - 4 \cdot A^2 \cdot N_u^4} + B \cdot C \cdot N_u\right) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^4}}$$

2SMT4R7



Unit. $AB := 1$ Given. $N_1 := 2.39394$ $N_2 := .94949$ $N_3 := 1.23232$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u^2\right)}{A \cdot B \cdot C} = 3.289856$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u^2\right)\right]^2}}$$

$$Den := \frac{A \cdot B \cdot C}{\sqrt{(A \cdot B \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{A^2 \cdot B^2 \cdot C^2}}{A \cdot B \cdot C \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u \cdot \left(N_u^2 + 1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 0: $$\frac{N_u \cdot \sqrt{A^2} \cdot \left(A^2 + N_u^2\right)}{A \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 2, 0: $$\frac{N_u \cdot \sqrt{B^2} \cdot \left(N_u^2 + 1\right)}{B \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 2, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot B^2} \cdot \left(A^2 + N_u^2\right)}{A \cdot B \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

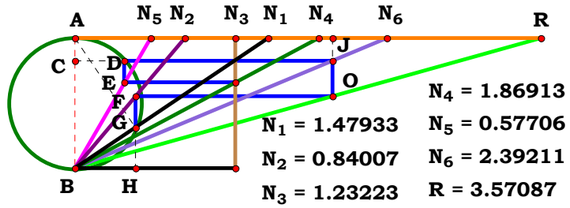
0, 0, 3: $$\frac{N_u \cdot \sqrt{C^2} \cdot \left(N_u^2 + 1\right)}{C \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 3: $$\frac{N_u \cdot \sqrt{A^2 \cdot C^2} \cdot \left(A^2 + N_u^2\right)}{A \cdot C \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{B^2 \cdot C^2} \cdot \left(N_u^2 + 1\right)}{B \cdot C \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 2, 3: $$\frac{N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{A^2 \cdot B^2 \cdot C^2}}{A \cdot B \cdot C \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

2SMT4R9



Unit. $AB := 1$ **Given.** $N_1 := 1.47933$ $N_2 := .84007$ $N_3 := 1.23223$

$N_4 := 1.86913$ $N_5 := .57706$ $N_6 := 2.39211$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(A^2+N_u^2\right)}{2\cdot A\cdot B\cdot C\cdot E\cdot F}=3.570887$$

$$Num := \frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(A^2+N_u^2\right)}{\sqrt{\left[\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(A^2+N_u^2\right)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot B\cdot C\cdot E\cdot F}{\sqrt{(2\cdot A\cdot B\cdot C\cdot E\cdot F)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot B^2\cdot C^2\cdot E^2\cdot F^2}}{A\cdot B\cdot C\cdot E\cdot F\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(A^2+N_u^2\right)^2}}=0$$

For 6 variables there are 64 subsets.

0, 0, 0, 0, 0, 0:

$$\frac{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]\cdot\left(N_u^2+1\right)}{\sqrt{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 0, 0, 0, 0:

$$\frac{\sqrt{A^2}\cdot\left(A^2+N_u^2\right)\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]}{A\cdot\sqrt{\left(A^2+N_u^2\right)^2\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]^2}}$$

0, 2, 0, 0, 0, 0:

$$\frac{\sqrt{B^2}\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]\cdot\left(N_u^2+1\right)}{B\cdot\sqrt{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 2, 0, 0, 0, 0:

$$\frac{\sqrt{A^2\cdot B^2}\cdot\left(A^2+N_u^2\right)\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]}{A\cdot B\cdot\sqrt{\left(A^2+N_u^2\right)^2\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]^2}}$$

0, 0, 3, 0, 0, 0:

$$\frac{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]\cdot\sqrt{C^2}\cdot\left(N_u^2+1\right)}{C\cdot\sqrt{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 3, 0, 0, 0:

$$\frac{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]\cdot\sqrt{A^2\cdot C^2}\cdot\left(A^2+N_u^2\right)}{A\cdot C\cdot\sqrt{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 2, 3, 0, 0, 0:

$$\frac{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]\cdot\sqrt{B^2\cdot C^2}\cdot\left(N_u^2+1\right)}{B\cdot C\cdot\sqrt{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 2, 3, 0, 0, 0:

$$\frac{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot B^2\cdot C^2}}{A\cdot B\cdot C\cdot\sqrt{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 0, 0, 4, 0, 0:

$$\frac{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]\cdot\left(N_u^2+1\right)}{\sqrt{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 0, 4, 0, 0:

$$\frac{\sqrt{A^2}\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]\cdot\left(A^2+N_u^2\right)}{A\cdot\sqrt{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 2, 0, 4, 0, 0:

$$\frac{\sqrt{B^2}\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]\cdot\left(N_u^2+1\right)}{B\cdot\sqrt{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 2, 0, 4, 0, 0:

$$\frac{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]\cdot\sqrt{A^2\cdot B^2}\cdot\left(A^2+N_u^2\right)}{A\cdot B\cdot\sqrt{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 0, 3, 4, 0, 0:

$$\frac{\sqrt{C^2}\cdot\left(N_u^2+1\right)\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]}{C\cdot\sqrt{\left(N_u^2+1\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]^2}}$$

1, 0, 3, 4, 0, 0:

$$\frac{\sqrt{A^2\cdot C^2}\cdot\left(A^2+N_u^2\right)\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]}{A\cdot C\cdot\sqrt{\left(A^2+N_u^2\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]^2}}$$

0, 2, 3, 4, 0, 0:

$$\frac{\sqrt{B^2\cdot C^2}\cdot\left(N_u^2+1\right)\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]}{B\cdot C\cdot\sqrt{\left(N_u^2+1\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]^2}}$$

1, 2, 3, 4, 0, 0:

$$\frac{\left(A^2+N_u^2\right)\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]\cdot\sqrt{A^2\cdot B^2\cdot C^2}}{A\cdot B\cdot C\cdot\sqrt{\left(A^2+N_u^2\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]^2}}$$

0, 0, 0, 0, 5, 0:

$$\frac{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]\cdot\sqrt{E^2}\cdot\left(N_u^2+1\right)}{E\cdot\sqrt{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 0, 0, 5, 0:

$$\frac{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]\cdot\sqrt{A^2\cdot E^2}\cdot\left(A^2+N_u^2\right)}{A\cdot E\cdot\sqrt{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 2, 0, 0, 5, 0:

$$\frac{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]\cdot\sqrt{B^2\cdot E^2}\cdot\left(N_u^2+1\right)}{B\cdot E\cdot\sqrt{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 2, 0, 0, 5, 0:

$$\frac{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot B^2\cdot E^2}}{A\cdot B\cdot E\cdot\sqrt{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 0, 3, 0, 5, 0:

$$\frac{\sqrt{C^2\cdot E^2}\cdot\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(N_u^2+1\right)}{C\cdot E\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 3, 0, 5, 0:

$$\frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot C^2\cdot E^2}}{A\cdot C\cdot E\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 2, 3, 0, 5, 0:

$$\frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(N_u^2+1\right)\cdot\sqrt{B^2\cdot C^2\cdot E^2}}{B\cdot C\cdot E\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 2, 3, 0, 5, 0:

$$\frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot B^2\cdot C^2\cdot E^2}}{A\cdot B\cdot C\cdot E\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 0, 0, 4, 5, 0:

$$\frac{\sqrt{E^2}\cdot\left(N_u^2+1\right)\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]}{E\cdot\sqrt{\left(N_u^2+1\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]^2}}$$

1, 0, 0, 4, 5, 0:

$$\frac{\sqrt{A^2\cdot E^2}\cdot\left(A^2+N_u^2\right)\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]}{A\cdot E\cdot\sqrt{\left(A^2+N_u^2\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]^2}}$$

0, 2, 0, 4, 5, 0:

$$\frac{\sqrt{B^2\cdot E^2}\cdot\left(N_u^2+1\right)\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]}{B\cdot E\cdot\sqrt{\left(N_u^2+1\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]^2}}$$

1, 2, 0, 4, 5, 0:

$$\frac{\left(A^2+N_u^2\right)\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]\cdot\sqrt{A^2\cdot B^2\cdot E^2}}{A\cdot B\cdot E\cdot\sqrt{\left(A^2+N_u^2\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]^2}}$$

0, 0, 3, 4, 5, 0:

$$\frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\sqrt{C^2\cdot E^2}\cdot\left(N_u^2+1\right)}{C\cdot E\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 3, 4, 5, 0:

$$\frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot C^2\cdot E^2}}{A\cdot C\cdot E\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 2, 3, 4, 5, 0:

$$\frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(N_u^2+1\right)\cdot\sqrt{B^2\cdot C^2\cdot E^2}}{B\cdot C\cdot E\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 2, 3, 4, 5, 0:

$$\frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot B^2\cdot C^2\cdot E^2}}{A\cdot B\cdot C\cdot E\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 0, 0, 0, 0, 6:

$$\frac{\sqrt{F^2}\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]\cdot\left(N_u^2+1\right)}{F\cdot\sqrt{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 0, 0, 0, 6:

$$\frac{\sqrt{A^2\cdot F^2}\cdot\left(A^2+N_u^2\right)\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]}{A\cdot F\cdot\sqrt{\left(A^2+N_u^2\right)^2\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]^2}}$$

0, 2, 0, 0, 0, 6:

$$\frac{\sqrt{B^2\cdot F^2}\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]\cdot\left(N_u^2+1\right)}{B\cdot F\cdot\sqrt{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 2, 0, 0, 0, 6:

$$\frac{\left(A^2+N_u^2\right)\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]\cdot\sqrt{A^2\cdot B^2\cdot F^2}}{A\cdot B\cdot F\cdot\sqrt{\left(A^2+N_u^2\right)^2\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot N_u^2-1\right)}\right]^2}}$$

0, 0, 3, 0, 0, 6:

$$\frac{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]\cdot\sqrt{C^2\cdot F^2}\cdot\left(N_u^2+1\right)}{C\cdot F\cdot\sqrt{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 3, 0, 0, 6:

$$\frac{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot C^2\cdot F^2}}{A\cdot C\cdot F\cdot\sqrt{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 2, 3, 0, 0, 6:

$$\frac{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]\cdot\left(N_u^2+1\right)\cdot\sqrt{B^2\cdot C^2\cdot F^2}}{B\cdot C\cdot F\cdot\sqrt{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 2, 3, 0, 0, 6:

$$\frac{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot B^2\cdot C^2\cdot F^2}}{A\cdot B\cdot C\cdot F\cdot\sqrt{\left[C\cdot N_u+\sqrt{N_u^2\cdot\left(C^2-4\cdot N_u^2\right)}\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 0, 0, 4, 0, 6:

$$\frac{\sqrt{F^2}\cdot\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]\cdot\left(N_u^2+1\right)}{F\cdot\sqrt{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 0, 4, 0, 6:

$$\frac{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]\cdot\sqrt{A^2\cdot F^2}\cdot\left(A^2+N_u^2\right)}{A\cdot F\cdot\sqrt{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 2, 0, 4, 0, 6:

$$\frac{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]\cdot\sqrt{B^2\cdot F^2}\cdot\left(N_u^2+1\right)}{B\cdot F\cdot\sqrt{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

1, 2, 0, 4, 0, 6:

$$\frac{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot B^2\cdot F^2}}{A\cdot B\cdot F\cdot\sqrt{\left[N_u+\sqrt{-N_u^2\cdot\left(4\cdot D^2\cdot N_u^2-1\right)}\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 0, 3, 4, 0, 6:

$$\frac{\sqrt{C^2\cdot F^2}\cdot\left(N_u^2+1\right)\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]}{C\cdot F\cdot\sqrt{\left(N_u^2+1\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]^2}}$$

1, 0, 3, 4, 0, 6:

$$\frac{\left(A^2+N_u^2\right)\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]\cdot\sqrt{A^2\cdot C^2\cdot F^2}}{A\cdot C\cdot F\cdot\sqrt{\left(A^2+N_u^2\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]^2}}$$

0, 2, 3, 4, 0, 6:

$$\frac{\left(N_u^2+1\right)\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]\cdot\sqrt{B^2\cdot C^2\cdot F^2}}{B\cdot C\cdot F\cdot\sqrt{\left(N_u^2+1\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]^2}}$$

1, 2, 3, 4, 0, 6:

$$\frac{\left(A^2+N_u^2\right)\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]\cdot\sqrt{A^2\cdot B^2\cdot C^2\cdot F^2}}{A\cdot B\cdot C\cdot F\cdot\sqrt{\left(A^2+N_u^2\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(C^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot N_u\right]^2}}$$

$$0,0,0,0,5,6:\quad \frac{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]\cdot\sqrt{E^2\cdot F^2}\cdot\left(N_u^2+1\right)}{E\cdot F\cdot\sqrt{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

$$1,0,0,0,5,6:\quad \frac{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot E^2\cdot F^2}}{A\cdot E\cdot F\cdot\sqrt{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

$$0,2,0,0,5,6:\quad \frac{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]\cdot\left(N_u^2+1\right)\cdot\sqrt{B^2\cdot E^2\cdot F^2}}{B\cdot E\cdot F\cdot\sqrt{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]^2\cdot\left(N_u^2+1\right)^2}}$$

$$1,2,0,0,5,6:\quad \frac{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot B^2\cdot E^2\cdot F^2}}{A\cdot B\cdot E\cdot F\cdot\sqrt{\left[E\cdot N_u+\sqrt{N_u^2\cdot\left(E^2-4\cdot N_u^2\right)}\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

$$0,0,3,0,5,6:\quad \frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(N_u^2+1\right)\cdot\sqrt{C^2\cdot E^2\cdot F^2}}{C\cdot E\cdot F\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(N_u^2+1\right)^2}}$$

$$1,0,3,0,5,6:\quad \frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot C^2\cdot E^2\cdot F^2}}{A\cdot C\cdot E\cdot F\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

$$0,2,3,0,5,6:\quad \frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(N_u^2+1\right)\cdot\sqrt{B^2\cdot C^2\cdot E^2\cdot F^2}}{B\cdot C\cdot E\cdot F\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(N_u^2+1\right)^2}}$$

$$1,2,3,0,5,6:\quad \frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot B^2\cdot C^2\cdot E^2\cdot F^2}}{A\cdot B\cdot C\cdot E\cdot F\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

$$0,0,0,4,5,6:\quad \frac{\sqrt{E^2\cdot F^2}\cdot\left(N_u^2+1\right)\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]}{E\cdot F\cdot\sqrt{\left(N_u^2+1\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]^2}}$$

$$1,0,0,4,5,6:\quad \frac{\left(A^2+N_u^2\right)\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]\cdot\sqrt{A^2\cdot E^2\cdot F^2}}{A\cdot E\cdot F\cdot\sqrt{\left(A^2+N_u^2\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]^2}}$$

$$0,2,0,4,5,6:\quad \frac{\left(N_u^2+1\right)\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]\cdot\sqrt{B^2\cdot E^2\cdot F^2}}{B\cdot E\cdot F\cdot\sqrt{\left(N_u^2+1\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]^2}}$$

$$1,2,0,4,5,6:\quad \frac{\left(A^2+N_u^2\right)\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]\cdot\sqrt{A^2\cdot B^2\cdot E^2\cdot F^2}}{A\cdot B\cdot E\cdot F\cdot\sqrt{\left(A^2+N_u^2\right)^2\cdot\left[\sqrt{N_u^2\cdot\left(E^2-4\cdot D^2\cdot N_u^2\right)}+E\cdot N_u\right]^2}}$$

$$0,0,3,4,5,6:\quad \frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(N_u^2+1\right)\cdot\sqrt{C^2\cdot E^2\cdot F^2}}{C\cdot E\cdot F\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(N_u^2+1\right)^2}}$$

$$1,0,3,4,5,6:\quad \frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot C^2\cdot E^2\cdot F^2}}{A\cdot C\cdot E\cdot F\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

$$0,2,3,4,5,6:\quad \frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(N_u^2+1\right)\cdot\sqrt{B^2\cdot C^2\cdot E^2\cdot F^2}}{B\cdot C\cdot E\cdot F\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(N_u^2+1\right)^2}}$$

$$1,2,3,4,5,6:\quad \frac{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A^2\cdot B^2\cdot C^2\cdot E^2\cdot F^2}}{A\cdot B\cdot C\cdot E\cdot F\cdot\sqrt{\left[\sqrt{N_u^2\cdot\left(C^2\cdot E^2-4\cdot D^2\cdot N_u^2\right)}+C\cdot E\cdot N_u\right]^2\cdot\left(A^2+N_u^2\right)^2}}$$

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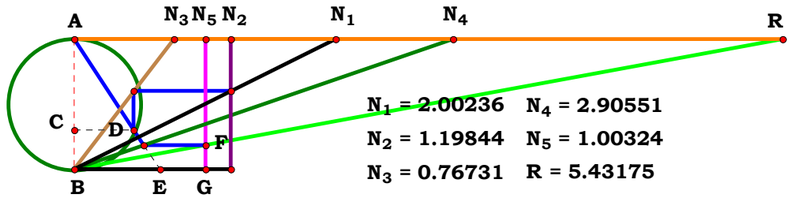


Unit. $AB := 1$ Given. $N_1 := 2.00236$ $N_2 := 1.19844$ $N_3 := .76731$

$N_4 := 2.90551$ $N_5 := 1.00324$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{\sqrt{B^2 \cdot C^2 \cdot N_u{}^2 - 4 \cdot A^2 \cdot N_u{}^4} + N_u \cdot (2 \cdot A \cdot D + B \cdot C)}{2 \cdot A \cdot D \cdot E} = 5.431813$$

$$Num := \frac{\sqrt{B^2 \cdot C^2 \cdot N_u{}^2 - 4 \cdot A^2 \cdot N_u{}^4} + N_u \cdot (2 \cdot A \cdot D + B \cdot C)}{\sqrt{\left[\sqrt{B^2 \cdot C^2 \cdot N_u{}^2 - 4 \cdot A^2 \cdot N_u{}^4} + N_u \cdot (2 \cdot A \cdot D + B \cdot C)\right]^2}}$$

$$Den := \frac{2 \cdot A \cdot D \cdot E}{\sqrt{(2 \cdot A \cdot D \cdot E)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left(\sqrt{B^2 \cdot C^2 \cdot N_u{}^2 - 4 \cdot A^2 \cdot N_u{}^4} + 2 \cdot A \cdot D \cdot N_u + B \cdot C \cdot N_u\right) \cdot \sqrt{A^2 \cdot D^2 \cdot E^2}}{A \cdot D \cdot E \cdot \sqrt{\left[\sqrt{B^2 \cdot C^2 \cdot N_u{}^2 - 4 \cdot A^2 \cdot N_u{}^4} + N_u \cdot (2 \cdot A \cdot D + B \cdot C)\right]^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0:

$$\frac{3\cdot N_u+\sqrt{{N_u}^2-4\cdot {N_u}^4}}{\sqrt{\left(3\cdot N_u+\sqrt{{N_u}^2-4\cdot {N_u}^4}\right)^2}}$$

1, 0, 0, 0, 0:

$$\frac{\sqrt{A^2}\cdot\left(N_u+\sqrt{{N_u}^2-4\cdot A^2\cdot {N_u}^4}+2\cdot A\cdot N_u\right)}{A\cdot\sqrt{\left[\sqrt{{N_u}^2-4\cdot A^2\cdot {N_u}^4}+N_u\cdot(2\cdot A+1)\right]^2}}$$

0, 2, 0, 0, 0:

$$\frac{2\cdot N_u+B\cdot N_u+\sqrt{B^2\cdot {N_u}^2-4\cdot {N_u}^4}}{\sqrt{\left[\sqrt{B^2\cdot {N_u}^2-4\cdot {N_u}^4}+N_u\cdot(B+2)\right]^2}}$$

1, 2, 0, 0, 0:

$$\frac{\sqrt{A^2}\cdot\left(\sqrt{B^2\cdot {N_u}^2-4\cdot A^2\cdot {N_u}^4}+2\cdot A\cdot N_u+B\cdot N_u\right)}{A\cdot\sqrt{\left[\sqrt{B^2\cdot {N_u}^2-4\cdot A^2\cdot {N_u}^4}+N_u\cdot(2\cdot A+B)\right]^2}}$$

0, 0, 3, 0, 0:

$$\frac{2\cdot N_u+C\cdot N_u+\sqrt{C^2\cdot {N_u}^2-4\cdot {N_u}^4}}{\sqrt{\left[\sqrt{C^2\cdot {N_u}^2-4\cdot {N_u}^4}+N_u\cdot(C+2)\right]^2}}$$

1, 0, 3, 0, 0:

$$\frac{\sqrt{A^2}\cdot\left(\sqrt{C^2\cdot {N_u}^2-4\cdot A^2\cdot {N_u}^4}+2\cdot A\cdot N_u+C\cdot N_u\right)}{A\cdot\sqrt{\left[\sqrt{C^2\cdot {N_u}^2-4\cdot A^2\cdot {N_u}^4}+N_u\cdot(2\cdot A+C)\right]^2}}$$

0, 2, 3, 0, 0:

$$\frac{2\cdot N_u+\sqrt{B^2\cdot C^2\cdot {N_u}^2-4\cdot {N_u}^4}+B\cdot C\cdot N_u}{\sqrt{\left[\sqrt{B^2\cdot C^2\cdot {N_u}^2-4\cdot {N_u}^4}+N_u\cdot(B\cdot C+2)\right]^2}}$$

1, 2, 3, 0, 0:

$$\frac{\sqrt{A^2}\cdot\left(\sqrt{B^2\cdot C^2\cdot {N_u}^2-4\cdot A^2\cdot {N_u}^4}+2\cdot A\cdot N_u+B\cdot C\cdot N_u\right)}{A\cdot\sqrt{\left[\sqrt{B^2\cdot C^2\cdot {N_u}^2-4\cdot A^2\cdot {N_u}^4}+N_u\cdot(2\cdot A+B\cdot C)\right]^2}}$$

0, 0, 0, 4, 0:

$$\frac{\sqrt{D^2}\cdot\left(N_u+\sqrt{{N_u}^2-4\cdot {N_u}^4}+2\cdot D\cdot N_u\right)}{D\cdot\sqrt{\left[N_u\cdot(2\cdot D+1)+\sqrt{{N_u}^2-4\cdot {N_u}^4}\right]^2}}$$

1, 0, 0, 4, 0:

$$\frac{\sqrt{A^2\cdot D^2}\cdot\left(N_u+\sqrt{{N_u}^2-4\cdot A^2\cdot {N_u}^4}+2\cdot A\cdot D\cdot N_u\right)}{A\cdot D\cdot\sqrt{\left[\sqrt{{N_u}^2-4\cdot A^2\cdot {N_u}^4}+N_u\cdot(2\cdot A\cdot D+1)\right]^2}}$$

0, 2, 0, 4, 0:

$$\frac{\sqrt{D^2}\cdot\left(B\cdot N_u+2\cdot D\cdot N_u+\sqrt{B^2\cdot {N_u}^2-4\cdot {N_u}^4}\right)}{D\cdot\sqrt{\left[\sqrt{B^2\cdot {N_u}^2-4\cdot {N_u}^4}+N_u\cdot(B+2\cdot D)\right]^2}}$$

1, 2, 0, 4, 0:

$$\frac{\sqrt{A^2\cdot D^2}\cdot\left(\sqrt{B^2\cdot {N_u}^2-4\cdot A^2\cdot {N_u}^4}+B\cdot N_u+2\cdot A\cdot D\cdot N_u\right)}{A\cdot D\cdot\sqrt{\left[\sqrt{B^2\cdot {N_u}^2-4\cdot A^2\cdot {N_u}^4}+N_u\cdot(B+2\cdot A\cdot D)\right]^2}}$$

0, 0, 3, 4, 0:

$$\frac{\sqrt{D^2}\cdot\left(C\cdot N_u+2\cdot D\cdot N_u+\sqrt{C^2\cdot {N_u}^2-4\cdot {N_u}^4}\right)}{D\cdot\sqrt{\left[\sqrt{C^2\cdot {N_u}^2-4\cdot {N_u}^4}+N_u\cdot(C+2\cdot D)\right]^2}}$$

1, 0, 3, 4, 0:

$$\frac{\sqrt{A^2\cdot D^2}\cdot\left(\sqrt{C^2\cdot {N_u}^2-4\cdot A^2\cdot {N_u}^4}+C\cdot N_u+2\cdot A\cdot D\cdot N_u\right)}{A\cdot D\cdot\sqrt{\left[\sqrt{C^2\cdot {N_u}^2-4\cdot A^2\cdot {N_u}^4}+N_u\cdot(C+2\cdot A\cdot D)\right]^2}}$$

0, 2, 3, 4, 0:

$$\frac{\sqrt{D^2}\cdot\left(\sqrt{B^2\cdot C^2\cdot {N_u}^2-4\cdot {N_u}^4}+2\cdot D\cdot N_u+B\cdot C\cdot N_u\right)}{D\cdot\sqrt{\left[\sqrt{B^2\cdot C^2\cdot {N_u}^2-4\cdot {N_u}^4}+N_u\cdot(2\cdot D+B\cdot C)\right]^2}}$$

1, 2, 3, 4, 0:

$$\frac{\sqrt{A^2\cdot D^2}\cdot\left(\sqrt{B^2\cdot C^2\cdot {N_u}^2-4\cdot A^2\cdot {N_u}^4}+2\cdot A\cdot D\cdot N_u+B\cdot C\cdot N_u\right)}{A\cdot D\cdot\sqrt{\left[\sqrt{B^2\cdot C^2\cdot {N_u}^2-4\cdot A^2\cdot {N_u}^4}+N_u\cdot(2\cdot A\cdot D+B\cdot C)\right]^2}}$$

0, 0, 0, 0, 5:

$$\frac{\sqrt{E^2}\cdot\left(3\cdot N_u+\sqrt{{N_u}^2-4\cdot{N_u}^4}\right)}{E\cdot\sqrt{\left(3\cdot N_u+\sqrt{{N_u}^2-4\cdot{N_u}^4}\right)^2}}$$

1, 0, 0, 0, 5:

$$\frac{\sqrt{A^2\cdot E^2}\cdot\left(N_u+\sqrt{{N_u}^2-4\cdot A^2\cdot{N_u}^4}+2\cdot A\cdot N_u\right)}{A\cdot E\cdot\sqrt{\left[\sqrt{{N_u}^2-4\cdot A^2\cdot{N_u}^4}+N_u\cdot(2\cdot A+1)\right]^2}}$$

0, 2, 0, 0, 5:

$$\frac{\sqrt{E^2}\cdot\left(2\cdot N_u+B\cdot N_u+\sqrt{B^2\cdot{N_u}^2-4\cdot{N_u}^4}\right)}{E\cdot\sqrt{\left[\sqrt{B^2\cdot{N_u}^2-4\cdot{N_u}^4}+N_u\cdot(B+2)\right]^2}}$$

1, 2, 0, 0, 5:

$$\frac{\sqrt{A^2\cdot E^2}\cdot\left(\sqrt{B^2\cdot{N_u}^2-4\cdot A^2\cdot{N_u}^4}+2\cdot A\cdot N_u+B\cdot N_u\right)}{A\cdot E\cdot\sqrt{\left[\sqrt{B^2\cdot{N_u}^2-4\cdot A^2\cdot{N_u}^4}+N_u\cdot(2\cdot A+B)\right]^2}}$$

0, 0, 3, 0, 5:

$$\frac{\sqrt{E^2}\cdot\left(2\cdot N_u+C\cdot N_u+\sqrt{C^2\cdot{N_u}^2-4\cdot{N_u}^4}\right)}{E\cdot\sqrt{\left[\sqrt{C^2\cdot{N_u}^2-4\cdot{N_u}^4}+N_u\cdot(C+2)\right]^2}}$$

1, 0, 3, 0, 5:

$$\frac{\sqrt{A^2\cdot E^2}\cdot\left(\sqrt{C^2\cdot{N_u}^2-4\cdot A^2\cdot{N_u}^4}+2\cdot A\cdot N_u+C\cdot N_u\right)}{A\cdot E\cdot\sqrt{\left[\sqrt{C^2\cdot{N_u}^2-4\cdot A^2\cdot{N_u}^4}+N_u\cdot(2\cdot A+C)\right]^2}}$$

0, 2, 3, 0, 5:

$$\frac{\sqrt{E^2}\cdot\left(2\cdot N_u+\sqrt{B^2\cdot C^2\cdot{N_u}^2-4\cdot{N_u}^4}+B\cdot C\cdot N_u\right)}{E\cdot\sqrt{\left[\sqrt{B^2\cdot C^2\cdot{N_u}^2-4\cdot{N_u}^4}+N_u\cdot(B\cdot C+2)\right]^2}}$$

1, 2, 3, 0, 5:

$$\frac{\sqrt{A^2\cdot E^2}\cdot\left(\sqrt{B^2\cdot C^2\cdot{N_u}^2-4\cdot A^2\cdot{N_u}^4}+2\cdot A\cdot N_u+B\cdot C\cdot N_u\right)}{A\cdot E\cdot\sqrt{\left[\sqrt{B^2\cdot C^2\cdot{N_u}^2-4\cdot A^2\cdot{N_u}^4}+N_u\cdot(2\cdot A+B\cdot C)\right]^2}}$$

0, 0, 0, 4, 5:

$$\frac{\sqrt{D^2\cdot E^2}\cdot\left(N_u+\sqrt{{N_u}^2-4\cdot{N_u}^4}+2\cdot D\cdot N_u\right)}{D\cdot E\cdot\sqrt{\left[N_u\cdot(2\cdot D+1)+\sqrt{{N_u}^2-4\cdot{N_u}^4}\right]^2}}$$

1, 0, 0, 4, 5:

$$\frac{\sqrt{A^2\cdot D^2\cdot E^2}\cdot\left(N_u+\sqrt{{N_u}^2-4\cdot A^2\cdot{N_u}^4}+2\cdot A\cdot D\cdot N_u\right)}{A\cdot D\cdot E\cdot\sqrt{\left[\sqrt{{N_u}^2-4\cdot A^2\cdot{N_u}^4}+N_u\cdot(2\cdot A\cdot D+1)\right]^2}}$$

0, 2, 0, 4, 5:

$$\frac{\sqrt{D^2\cdot E^2}\cdot\left(B\cdot N_u+2\cdot D\cdot N_u+\sqrt{B^2\cdot{N_u}^2-4\cdot{N_u}^4}\right)}{D\cdot E\cdot\sqrt{\left[\sqrt{B^2\cdot{N_u}^2-4\cdot{N_u}^4}+N_u\cdot(B+2\cdot D)\right]^2}}$$

1, 2, 0, 4, 5:

$$\frac{\sqrt{A^2\cdot D^2\cdot E^2}\cdot\left(\sqrt{B^2\cdot{N_u}^2-4\cdot A^2\cdot{N_u}^4}+B\cdot N_u+2\cdot A\cdot D\cdot N_u\right)}{A\cdot D\cdot E\cdot\sqrt{\left[\sqrt{B^2\cdot{N_u}^2-4\cdot A^2\cdot{N_u}^4}+N_u\cdot(B+2\cdot A\cdot D)\right]^2}}$$

0, 0, 3, 4, 5:

$$\frac{\sqrt{D^2\cdot E^2}\cdot\left(C\cdot N_u+2\cdot D\cdot N_u+\sqrt{C^2\cdot{N_u}^2-4\cdot{N_u}^4}\right)}{D\cdot E\cdot\sqrt{\left[\sqrt{C^2\cdot{N_u}^2-4\cdot{N_u}^4}+N_u\cdot(C+2\cdot D)\right]^2}}$$

1, 0, 3, 4, 5:

$$\frac{\sqrt{A^2\cdot D^2\cdot E^2}\cdot\left(\sqrt{C^2\cdot{N_u}^2-4\cdot A^2\cdot{N_u}^4}+C\cdot N_u+2\cdot A\cdot D\cdot N_u\right)}{A\cdot D\cdot E\cdot\sqrt{\left[\sqrt{C^2\cdot{N_u}^2-4\cdot A^2\cdot{N_u}^4}+N_u\cdot(C+2\cdot A\cdot D)\right]^2}}$$

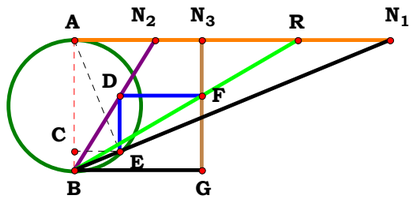
0, 2, 3, 4, 5:

$$\frac{\sqrt{D^2\cdot E^2}\cdot\left(\sqrt{B^2\cdot C^2\cdot{N_u}^2-4\cdot{N_u}^4}+2\cdot D\cdot N_u+B\cdot C\cdot N_u\right)}{D\cdot E\cdot\sqrt{\left[\sqrt{B^2\cdot C^2\cdot{N_u}^2-4\cdot{N_u}^4}+N_u\cdot(2\cdot D+B\cdot C)\right]^2}}$$

1, 2, 3, 4, 5:

$$\frac{\left(\sqrt{B^2\cdot C^2\cdot{N_u}^2-4\cdot A^2\cdot{N_u}^4}+2\cdot A\cdot D\cdot N_u+B\cdot C\cdot N_u\right)\cdot\sqrt{A^2\cdot D^2\cdot E^2}}{A\cdot D\cdot E\cdot\sqrt{\left[\sqrt{B^2\cdot C^2\cdot{N_u}^2-4\cdot A^2\cdot{N_u}^4}+N_u\cdot(2\cdot A\cdot D+B\cdot C)\right]^2}}$$

2SMT4R11



$N_1 = 2.41885$
$N_2 = 0.61730$
$N_3 = 0.98040$
$R = 1.71409$

Unit. $AB := 1$ **Given.** $N_1 := 2.41885$ $N_2 := .61730$ $N_3 := .98040$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u^2\right)}{A \cdot B \cdot C} = 1.714092$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u^2\right)\right]^2}}$$

$$Den := \frac{A \cdot B \cdot C}{\sqrt{(A \cdot B \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{A^2 \cdot B^2 \cdot C^2}}{A \cdot B \cdot C \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u \cdot \left(N_u^2 + 1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

0, 0, 3: $$\frac{N_u \cdot \sqrt{C^2} \cdot \left(N_u^2 + 1\right)}{C \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 0: $$\frac{N_u \cdot \sqrt{A^2} \cdot \left(A^2 + N_u^2\right)}{A \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

1, 0, 3: $$\frac{N_u \cdot \sqrt{A^2 \cdot C^2} \cdot \left(A^2 + N_u^2\right)}{A \cdot C \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

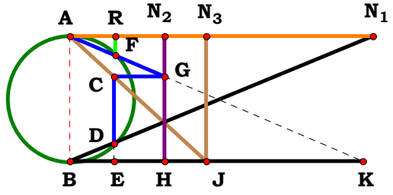
0, 2, 0: $$\frac{N_u \cdot \sqrt{B^2} \cdot \left(N_u^2 + 1\right)}{B \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{B^2 \cdot C^2} \cdot \left(N_u^2 + 1\right)}{B \cdot C \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 2, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot B^2} \cdot \left(A^2 + N_u^2\right)}{A \cdot B \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

1, 2, 3: $$\frac{N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{A^2 \cdot B^2 \cdot C^2}}{A \cdot B \cdot C \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

2SMT5R0



$N_1 = 2.42424$
$N_2 = 0.75758$
$N_3 = 1.09091$
$R = 0.36089$

Unit. $AB := 1$ Given. $N_1 := 2.42424$ $N_2 := .75758$ $N_3 := 1.09091$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A \cdot B \cdot C \cdot N_u \cdot \left(A^2 + {N_u}^2\right)}{{N_u}^2 \cdot \left(A^2 + {N_u}^2\right)^2 + A^2 \cdot B^2 \cdot C^2} = 0.360884$$

$$Num := \frac{A \cdot B \cdot C \cdot N_u \cdot \left(A^2 + {N_u}^2\right)}{\sqrt{\left[A \cdot B \cdot C \cdot N_u \cdot \left(A^2 + {N_u}^2\right)\right]^2}}$$

$$Den := \frac{{N_u}^2 \cdot \left(A^2 + {N_u}^2\right)^2 + A^2 \cdot B^2 \cdot C^2}{\sqrt{\left[{N_u}^2 \cdot \left(A^2 + {N_u}^2\right)^2 + A^2 \cdot B^2 \cdot C^2\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot B \cdot C \cdot N_u \cdot \left(A^2 + {N_u}^2\right) \cdot \sqrt{\left[{N_u}^2 \cdot \left(A^2 + {N_u}^2\right)^2 + A^2 \cdot B^2 \cdot C^2\right]^2}}{\left(A^4 \cdot {N_u}^2 + A^2 \cdot B^2 \cdot C^2 + 2 \cdot A^2 \cdot {N_u}^4 + {N_u}^6\right) \cdot \sqrt{A^2 \cdot B^2 \cdot C^2 \cdot {N_u}^2 \cdot \left(A^2 + {N_u}^2\right)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u \cdot \sqrt{\left[N_u^2 \cdot \left(N_u^2+1\right)^2+1\right]^2} \cdot \left(N_u^2+1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2+1\right)^2} \cdot \left(N_u^6+2 \cdot N_u^4+N_u^2+1\right)}$$

1, 0, 0:

$$\frac{A \cdot N_u \cdot \left(A^2+N_u^2\right) \cdot \sqrt{\left[N_u^2 \cdot \left(A^2+N_u^2\right)^2+A^2\right]^2}}{\sqrt{A^2 \cdot N_u^2 \cdot \left(A^2+N_u^2\right)^2} \cdot \left(A^4 \cdot N_u^2+2 \cdot A^2 \cdot N_u^4+A^2+N_u^6\right)}$$

0, 2, 0:

$$\frac{B \cdot N_u \cdot \sqrt{\left[B^2+N_u^2 \cdot \left(N_u^2+1\right)^2\right]^2} \cdot \left(N_u^2+1\right)}{\sqrt{B^2 \cdot N_u^2 \cdot \left(N_u^2+1\right)^2} \cdot \left(B^2+N_u^6+2 \cdot N_u^4+N_u^2\right)}$$

1, 2, 0:

$$\frac{A \cdot B \cdot N_u \cdot \left(A^2+N_u^2\right) \cdot \sqrt{\left[N_u^2 \cdot \left(A^2+N_u^2\right)^2+A^2 \cdot B^2\right]^2}}{\left(A^4 \cdot N_u^2+A^2 \cdot B^2+2 \cdot A^2 \cdot N_u^4+N_u^6\right) \cdot \sqrt{A^2 \cdot B^2 \cdot N_u^2 \cdot \left(A^2+N_u^2\right)^2}}$$

0, 0, 3:

$$\frac{C \cdot N_u \cdot \sqrt{\left[C^2+N_u^2 \cdot \left(N_u^2+1\right)^2\right]^2} \cdot \left(N_u^2+1\right)}{\sqrt{C^2 \cdot N_u^2 \cdot \left(N_u^2+1\right)^2} \cdot \left(C^2+N_u^6+2 \cdot N_u^4+N_u^2\right)}$$

1, 0, 3:

$$\frac{A \cdot C \cdot N_u \cdot \left(A^2+N_u^2\right) \cdot \sqrt{\left[N_u^2 \cdot \left(A^2+N_u^2\right)^2+A^2 \cdot C^2\right]^2}}{\left(A^4 \cdot N_u^2+A^2 \cdot C^2+2 \cdot A^2 \cdot N_u^4+N_u^6\right) \cdot \sqrt{A^2 \cdot C^2 \cdot N_u^2 \cdot \left(A^2+N_u^2\right)^2}}$$

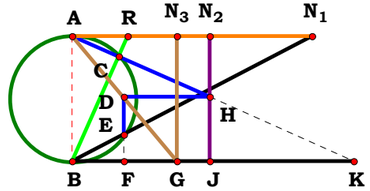
0, 2, 3:

$$\frac{B \cdot C \cdot N_u \cdot \sqrt{\left[B^2 \cdot C^2+N_u^2 \cdot \left(N_u^2+1\right)^2\right]^2} \cdot \left(N_u^2+1\right)}{\left(B^2 \cdot C^2+N_u^6+2 \cdot N_u^4+N_u^2\right) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^2 \cdot \left(N_u^2+1\right)^2}}$$

1, 2, 3:

$$\frac{A \cdot B \cdot C \cdot N_u \cdot \left(A^2+N_u^2\right) \cdot \sqrt{\left[N_u^2 \cdot \left(A^2+N_u^2\right)^2+A^2 \cdot B^2 \cdot C^2\right]^2}}{\left(A^4 \cdot N_u^2+A^2 \cdot B^2 \cdot C^2+2 \cdot A^2 \cdot N_u^4+N_u^6\right) \cdot \sqrt{A^2 \cdot B^2 \cdot C^2 \cdot N_u^2 \cdot \left(A^2+N_u^2\right)^2}}$$

2SMT5R1



$N_1 = 1.91919$
$N_2 = 1.10101$
$N_3 = 0.83838$
$R = 0.44395$

Unit. $AB := 1$ Given. $N_1 := 1.91919$ $N_2 := 1.10101$ $N_3 := .83838$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A \cdot B \cdot C}{A^2 \cdot N_u + N_u{}^3} = 0.443951$$

$$Num := \frac{A \cdot B \cdot C}{\sqrt{(A \cdot B \cdot C)^2}}$$

$$Den := \frac{A^2 \cdot N_u + N_u{}^3}{\sqrt{\left(A^2 \cdot N_u + N_u{}^3\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot B \cdot C \cdot \sqrt{\left(A^2 \cdot N_u + N_u{}^3\right)^2}}{N_u \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{A^2 \cdot B^2 \cdot C^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{\sqrt{\left(N_u{}^3+N_u\right)^2}}{N_u\cdot\left(N_u{}^2+1\right)}$$

0, 0, 3: $$\frac{C\cdot\sqrt{\left(N_u{}^3+N_u\right)^2}}{N_u\cdot\sqrt{C^2}\cdot\left(N_u{}^2+1\right)}$$

1, 0, 0: $$\frac{A\cdot\sqrt{\left(A^2\cdot N_u+N_u{}^3\right)^2}}{N_u\cdot\sqrt{A^2}\cdot\left(A^2+N_u{}^2\right)}$$

1, 0, 3: $$\frac{A\cdot C\cdot\sqrt{\left(A^2\cdot N_u+N_u{}^3\right)^2}}{N_u\cdot\sqrt{A^2\cdot C^2}\cdot\left(A^2+N_u{}^2\right)}$$

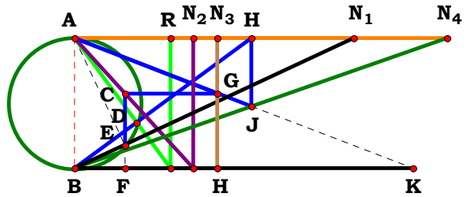
0, 2, 0: $$\frac{B\cdot\sqrt{\left(N_u{}^3+N_u\right)^2}}{N_u\cdot\sqrt{B^2}\cdot\left(N_u{}^2+1\right)}$$

0, 2, 3: $$\frac{B\cdot C\cdot\sqrt{\left(N_u{}^3+N_u\right)^2}}{N_u\cdot\sqrt{B^2\cdot C^2}\cdot\left(N_u{}^2+1\right)}$$

1, 2, 0: $$\frac{A\cdot B\cdot\sqrt{\left(A^2\cdot N_u+N_u{}^3\right)^2}}{N_u\cdot\sqrt{A^2\cdot B^2}\cdot\left(A^2+N_u{}^2\right)}$$

1, 2, 3: $$\frac{A\cdot B\cdot C\cdot\sqrt{\left(A^2\cdot N_u+N_u{}^3\right)^2}}{N_u\cdot\left(A^2+N_u{}^2\right)\cdot\sqrt{A^2\cdot B^2\cdot C^2}}$$

2SMT5R2



$N_1 = 2.13797$
$N_2 = 0.90787$
$N_3 = 1.09663$
$N_4 = 2.85708$
$R = 0.73548$

Unit. $AB := 1$ Given. $N_1 := 2.13797$ $N_2 := .90787$ $N_3 := 1.09663$ $N_4 := 2.85708$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{D \cdot A^2 + B \cdot C \cdot A + D \cdot N_u^2}{A^2 \cdot N_u + N_u^3} = 0.735478$$

$$Num := \frac{D \cdot A^2 + B \cdot C \cdot A + D \cdot N_u^2}{\sqrt{\left(D \cdot A^2 + B \cdot C \cdot A + D \cdot N_u^2\right)^2}}$$

$$Den := \frac{A^2 \cdot N_u + N_u^3}{\sqrt{\left(A^2 \cdot N_u + N_u^3\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left(A^2 \cdot N_u + N_u^3\right)^2} \cdot \left(D \cdot A^2 + B \cdot C \cdot A + D \cdot N_u^2\right)}{N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{\left(D \cdot A^2 + B \cdot C \cdot A + D \cdot N_u^2\right)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:

$$\frac{\sqrt{\left(N_u{}^3+N_u\right)^2}\cdot\left(N_u{}^2+2\right)}{N_u\cdot\sqrt{\left(N_u{}^2+2\right)^2}\cdot\left(N_u{}^2+1\right)}$$

1, 0, 0, 0:

$$\frac{\sqrt{\left(A^2\cdot N_u+N_u{}^3\right)^2}\cdot\left(A^2+A+N_u{}^2\right)}{N_u\cdot\sqrt{\left(A^2+A+N_u{}^2\right)^2}\cdot\left(A^2+N_u{}^2\right)}$$

0, 2, 0, 0:

$$\frac{\sqrt{\left(N_u{}^3+N_u\right)^2}\cdot\left(N_u{}^2+B+1\right)}{N_u\cdot\sqrt{\left(N_u{}^2+B+1\right)^2}\cdot\left(N_u{}^2+1\right)}$$

1, 2, 0, 0:

$$\frac{\sqrt{\left(A^2\cdot N_u+N_u{}^3\right)^2}\cdot\left(A^2+B\cdot A+N_u{}^2\right)}{N_u\cdot\left(A^2+N_u{}^2\right)\cdot\sqrt{\left(A^2+B\cdot A+N_u{}^2\right)^2}}$$

0, 0, 3, 0:

$$\frac{\sqrt{\left(N_u{}^3+N_u\right)^2}\cdot\left(N_u{}^2+C+1\right)}{N_u\cdot\sqrt{\left(N_u{}^2+C+1\right)^2}\cdot\left(N_u{}^2+1\right)}$$

1, 0, 3, 0:

$$\frac{\sqrt{\left(A^2\cdot N_u+N_u{}^3\right)^2}\cdot\left(A^2+C\cdot A+N_u{}^2\right)}{N_u\cdot\left(A^2+N_u{}^2\right)\cdot\sqrt{\left(A^2+C\cdot A+N_u{}^2\right)^2}}$$

0, 2, 3, 0:

$$\frac{\sqrt{\left(N_u{}^3+N_u\right)^2}\cdot\left(N_u{}^2+B\cdot C+1\right)}{N_u\cdot\sqrt{\left(N_u{}^2+B\cdot C+1\right)^2}\cdot\left(N_u{}^2+1\right)}$$

1, 2, 3, 0:

$$\frac{\sqrt{\left(A^2\cdot N_u+N_u{}^3\right)^2}\cdot\left(A^2+B\cdot C\cdot A+N_u{}^2\right)}{N_u\cdot\sqrt{\left(A^2+B\cdot C\cdot A+N_u{}^2\right)^2}\cdot\left(A^2+N_u{}^2\right)}$$

0, 0, 0, 4:

$$\frac{\sqrt{\left(N_u{}^3+N_u\right)^2}\cdot\left(D\cdot N_u{}^2+D+1\right)}{N_u\cdot\sqrt{\left(D\cdot N_u{}^2+D+1\right)^2}\cdot\left(N_u{}^2+1\right)}$$

1, 0, 0, 4:

$$\frac{\sqrt{\left(A^2\cdot N_u+N_u{}^3\right)^2}\cdot\left(D\cdot A^2+A+D\cdot N_u{}^2\right)}{N_u\cdot\left(A^2+N_u{}^2\right)\cdot\sqrt{\left(D\cdot A^2+A+D\cdot N_u{}^2\right)^2}}$$

0, 2, 0, 4:

$$\frac{\sqrt{\left(N_u{}^3+N_u\right)^2}\cdot\left(D\cdot N_u{}^2+B+D\right)}{N_u\cdot\sqrt{\left(D\cdot N_u{}^2+B+D\right)^2}\cdot\left(N_u{}^2+1\right)}$$

1, 2, 0, 4:

$$\frac{\sqrt{\left(A^2\cdot N_u+N_u{}^3\right)^2}\cdot\left(D\cdot A^2+B\cdot A+D\cdot N_u{}^2\right)}{N_u\cdot\sqrt{\left(D\cdot A^2+B\cdot A+D\cdot N_u{}^2\right)^2}\cdot\left(A^2+N_u{}^2\right)}$$

0, 0, 3, 4:

$$\frac{\sqrt{\left(N_u{}^3+N_u\right)^2}\cdot\left(D\cdot N_u{}^2+C+D\right)}{N_u\cdot\sqrt{\left(D\cdot N_u{}^2+C+D\right)^2}\cdot\left(N_u{}^2+1\right)}$$

1, 0, 3, 4:

$$\frac{\sqrt{\left(A^2\cdot N_u+N_u{}^3\right)^2}\cdot\left(D\cdot A^2+C\cdot A+D\cdot N_u{}^2\right)}{N_u\cdot\sqrt{\left(D\cdot A^2+C\cdot A+D\cdot N_u{}^2\right)^2}\cdot\left(A^2+N_u{}^2\right)}$$

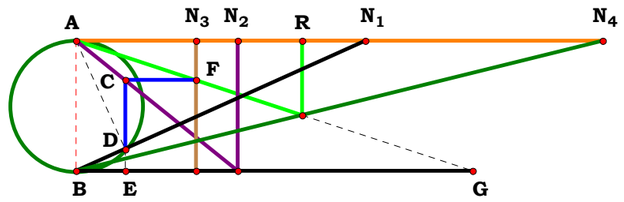
0, 2, 3, 4:

$$\frac{\sqrt{\left(N_u{}^3+N_u\right)^2}\cdot\left(D\cdot N_u{}^2+D+B\cdot C\right)}{N_u\cdot\sqrt{\left(D\cdot N_u{}^2+D+B\cdot C\right)^2}\cdot\left(N_u{}^2+1\right)}$$

1, 2, 3, 4:

$$\frac{\sqrt{\left(A^2\cdot N_u+N_u{}^3\right)^2}\cdot\left(D\cdot A^2+B\cdot C\cdot A+D\cdot N_u{}^2\right)}{N_u\cdot\left(A^2+N_u{}^2\right)\cdot\sqrt{\left(D\cdot A^2+B\cdot C\cdot A+D\cdot N_u{}^2\right)^2}}$$

2SMT5R3



$N_1 = 2.21545$
$N_2 = 1.23719$
$N_3 = 0.92228$
$N_4 = 4.03874$
$R = 1.73542$

Unit. $AB := 1$ Given. $N_1 := 2.21545$ $N_2 := 1.23719$ $N_3 := .92228$ $N_4 := 4.03874$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u{}^2\right)}{A^2 \cdot D + A \cdot B \cdot C + D \cdot N_u{}^2} = 1.735415$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u{}^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{A^2 \cdot D + A \cdot B \cdot C + D \cdot N_u{}^2}{\sqrt{\left(A^2 \cdot D + A \cdot B \cdot C + D \cdot N_u{}^2\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{\left(D \cdot A^2 + B \cdot C \cdot A + D \cdot N_u{}^2\right)^2}}{\sqrt{N_u{}^2 \cdot \left(A^2 + N_u{}^2\right)^2} \cdot \left(D \cdot A^2 + B \cdot C \cdot A + D \cdot N_u{}^2\right)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:

$$\frac{N_u \cdot \sqrt{\left(N_u^2+2\right)^2} \cdot \left(N_u^2+1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2+1\right)^2} \cdot \left(N_u^2+2\right)}$$

1, 0, 0, 0:

$$\frac{N_u \cdot \sqrt{\left(A^2+A+N_u^2\right)^2} \cdot \left(A^2+N_u^2\right)}{\sqrt{N_u^2 \cdot \left(A^2+N_u^2\right)^2} \cdot \left(A^2+A+N_u^2\right)}$$

0, 2, 0, 0:

$$\frac{N_u \cdot \sqrt{\left(N_u^2+B+1\right)^2} \cdot \left(N_u^2+1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2+1\right)^2} \cdot \left(N_u^2+B+1\right)}$$

1, 2, 0, 0:

$$\frac{N_u \cdot \left(A^2+N_u^2\right) \cdot \sqrt{\left(A^2+B \cdot A+N_u^2\right)^2}}{\sqrt{N_u^2 \cdot \left(A^2+N_u^2\right)^2} \cdot \left(A^2+B \cdot A+N_u^2\right)}$$

0, 0, 3, 0:

$$\frac{N_u \cdot \sqrt{\left(N_u^2+C+1\right)^2} \cdot \left(N_u^2+1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2+1\right)^2} \cdot \left(N_u^2+C+1\right)}$$

1, 0, 3, 0:

$$\frac{N_u \cdot \left(A^2+N_u^2\right) \cdot \sqrt{\left(A^2+C \cdot A+N_u^2\right)^2}}{\sqrt{N_u^2 \cdot \left(A^2+N_u^2\right)^2} \cdot \left(A^2+C \cdot A+N_u^2\right)}$$

0, 2, 3, 0:

$$\frac{N_u \cdot \sqrt{\left(N_u^2+B \cdot C+1\right)^2} \cdot \left(N_u^2+1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2+1\right)^2} \cdot \left(N_u^2+B \cdot C+1\right)}$$

1, 2, 3, 0:

$$\frac{N_u \cdot \sqrt{\left(A^2+B \cdot C \cdot A+N_u^2\right)^2} \cdot \left(A^2+N_u^2\right)}{\sqrt{N_u^2 \cdot \left(A^2+N_u^2\right)^2} \cdot \left(A^2+B \cdot C \cdot A+N_u^2\right)}$$

0, 0, 0, 4:

$$\frac{N_u \cdot \sqrt{\left(D \cdot N_u^2+D+1\right)^2} \cdot \left(N_u^2+1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2+1\right)^2} \cdot \left(D \cdot N_u^2+D+1\right)}$$

1, 0, 0, 4:

$$\frac{N_u \cdot \left(A^2+N_u^2\right) \cdot \sqrt{\left(D \cdot A^2+A+D \cdot N_u^2\right)^2}}{\sqrt{N_u^2 \cdot \left(A^2+N_u^2\right)^2} \cdot \left(D \cdot A^2+A+D \cdot N_u^2\right)}$$

0, 2, 0, 4:

$$\frac{N_u \cdot \sqrt{\left(D \cdot N_u^2+B+D\right)^2} \cdot \left(N_u^2+1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2+1\right)^2} \cdot \left(D \cdot N_u^2+B+D\right)}$$

1, 2, 0, 4:

$$\frac{N_u \cdot \sqrt{\left(D \cdot A^2+B \cdot A+D \cdot N_u^2\right)^2} \cdot \left(A^2+N_u^2\right)}{\sqrt{N_u^2 \cdot \left(A^2+N_u^2\right)^2} \cdot \left(D \cdot A^2+B \cdot A+D \cdot N_u^2\right)}$$

0, 0, 3, 4:

$$\frac{N_u \cdot \sqrt{\left(D \cdot N_u^2+C+D\right)^2} \cdot \left(N_u^2+1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2+1\right)^2} \cdot \left(D \cdot N_u^2+C+D\right)}$$

1, 0, 3, 4:

$$\frac{N_u \cdot \sqrt{\left(D \cdot A^2+C \cdot A+D \cdot N_u^2\right)^2} \cdot \left(A^2+N_u^2\right)}{\sqrt{N_u^2 \cdot \left(A^2+N_u^2\right)^2} \cdot \left(D \cdot A^2+C \cdot A+D \cdot N_u^2\right)}$$

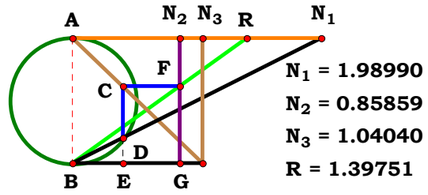
0, 2, 3, 4:

$$\frac{N_u \cdot \sqrt{\left(D \cdot N_u^2+D+B \cdot C\right)^2} \cdot \left(N_u^2+1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2+1\right)^2} \cdot \left(D \cdot N_u^2+D+B \cdot C\right)}$$

1, 2, 3, 4:

$$\frac{N_u \cdot \left(A^2+N_u^2\right) \cdot \sqrt{\left(D \cdot A^2+B \cdot C \cdot A+D \cdot N_u^2\right)^2}}{\sqrt{N_u^2 \cdot \left(A^2+N_u^2\right)^2} \cdot \left(D \cdot A^2+B \cdot C \cdot A+D \cdot N_u^2\right)}$$

2SMT5R4



Unit. $AB := 1$ Given. $N_1 := 1.98990$ $N_2 := .85859$ $N_3 := 1.04040$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u{}^2\right)}{B \cdot \left(A^2 - A \cdot C + N_u{}^2\right)} = 1.397522$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u{}^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{B \cdot \left(A^2 - A \cdot C + N_u{}^2\right)}{\sqrt{\left[B \cdot \left(A^2 - A \cdot C + N_u{}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2 - C \cdot A + N_u{}^2\right)^2} \cdot \left(A^2 + N_u{}^2\right)}{B \cdot \sqrt{N_u{}^2 \cdot \left(A^2 + N_u{}^2\right)^2} \cdot \left(A^2 - C \cdot A + N_u{}^2\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{\sqrt{N_u^4}\cdot\left(N_u^2+1\right)}{N_u\cdot\sqrt{N_u^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 0:

$$\frac{N_u\cdot\left(A^2+N_u^2\right)\cdot\sqrt{\left(A^2-A+N_u^2\right)^2}}{\sqrt{N_u^2\cdot\left(A^2+N_u^2\right)^2}\cdot\left(A^2-A+N_u^2\right)}$$

0, 2, 0:

$$\frac{\sqrt{B^2\cdot N_u^4}\cdot\left(N_u^2+1\right)}{B\cdot N_u\cdot\sqrt{N_u^2\cdot\left(N_u^2+1\right)^2}}$$

1, 2, 0:

$$\frac{N_u\cdot\left(A^2+N_u^2\right)\cdot\sqrt{B^2\cdot\left(A^2-A+N_u^2\right)^2}}{B\cdot\sqrt{N_u^2\cdot\left(A^2+N_u^2\right)^2}\cdot\left(A^2-A+N_u^2\right)}$$

0, 0, 3:

$$\frac{N_u\cdot\left(N_u^2+1\right)\cdot\sqrt{\left(N_u^2-C+1\right)^2}}{\sqrt{N_u^2\cdot\left(N_u^2+1\right)^2}\cdot\left(N_u^2-C+1\right)}$$

1, 0, 3:

$$\frac{N_u\cdot\left(A^2+N_u^2\right)\cdot\sqrt{\left(A^2-C\cdot A+N_u^2\right)^2}}{\sqrt{N_u^2\cdot\left(A^2+N_u^2\right)^2}\cdot\left(A^2-C\cdot A+N_u^2\right)}$$

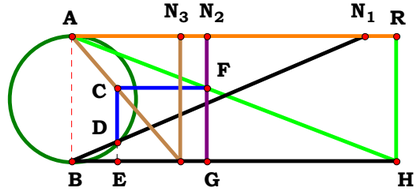
0, 2, 3:

$$\frac{N_u\cdot\sqrt{B^2\cdot\left(N_u^2-C+1\right)^2}\cdot\left(N_u^2+1\right)}{B\cdot\sqrt{N_u^2\cdot\left(N_u^2+1\right)^2}\cdot\left(N_u^2-C+1\right)}$$

1, 2, 3:

$$\frac{N_u\cdot\sqrt{B^2\cdot\left(A^2-C\cdot A+N_u^2\right)^2}\cdot\left(A^2+N_u^2\right)}{B\cdot\sqrt{N_u^2\cdot\left(A^2+N_u^2\right)^2}\cdot\left(A^2-C\cdot A+N_u^2\right)}$$

2SMT5R5



$N_1 = 2.34343$
$N_2 = 1.08081$
$N_3 = 0.86869$
$R = 2.60086$

Unit. $AB := 1$ **Given.** $N_1 := 2.34343$ $N_2 := 1.08081$ $N_3 := .86869$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u^2\right)}{A \cdot B \cdot C} = 2.600868$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u^2\right)\right]^2}}$$

$$Den := \frac{A \cdot B \cdot C}{\sqrt{(A \cdot B \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{A^2 \cdot B^2 \cdot C^2}}{A \cdot B \cdot C \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u \cdot \left(N_u^2 + 1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 0: $$\frac{N_u \cdot \sqrt{A^2} \cdot \left(A^2 + N_u^2\right)}{A \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 2, 0: $$\frac{N_u \cdot \sqrt{B^2} \cdot \left(N_u^2 + 1\right)}{B \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 2, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot B^2} \cdot \left(A^2 + N_u^2\right)}{A \cdot B \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

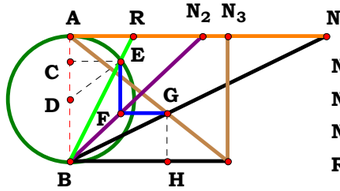
0, 0, 3: $$\frac{N_u \cdot \sqrt{C^2} \cdot \left(N_u^2 + 1\right)}{C \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 3: $$\frac{N_u \cdot \sqrt{A^2 \cdot C^2} \cdot \left(A^2 + N_u^2\right)}{A \cdot C \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{B^2 \cdot C^2} \cdot \left(N_u^2 + 1\right)}{B \cdot C \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 2, 3: $$\frac{N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{A^2 \cdot B^2 \cdot C^2}}{A \cdot B \cdot C \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

2SMT6R0



$N_1 = 2.05051$
$N_2 = 1.06061$
$N_3 = 1.26263$
$R = 0.50885$

Unit. $AB := 1$ **Given.** $N_1 := 2.05051$ $N_2 := 1.06061$ $N_3 := 1.26263$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2 \cdot A \cdot {N_u}^2}{\sqrt{{N_u}^2 \cdot \left[B \cdot (A + C) - 2 \cdot A \cdot N_u\right] \cdot \left[B \cdot (A + C) + 2 \cdot A \cdot N_u\right]} + B \cdot N_u \cdot (A + C)} = 0.508856$$

$$Num := \frac{2 \cdot A \cdot {N_u}^2}{\sqrt{\left(2 \cdot A \cdot {N_u}^2\right)^2}}$$

$$Den := \frac{\sqrt{{N_u}^2 \cdot \left[B \cdot (A + C) - 2 \cdot A \cdot N_u\right] \cdot \left[B \cdot (A + C) + 2 \cdot A \cdot N_u\right]} + B \cdot N_u \cdot (A + C)}{\sqrt{\left[\sqrt{{N_u}^2 \cdot \left[B \cdot (A + C) - 2 \cdot A \cdot N_u\right] \cdot \left[B \cdot (A + C) + 2 \cdot A \cdot N_u\right]} + B \cdot N_u \cdot (A + C)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot {N_u}^2 \cdot \sqrt{\left[\sqrt{{N_u}^2 \cdot \left[B \cdot (A + C) - 2 \cdot A \cdot N_u\right] \cdot \left[B \cdot (A + C) + 2 \cdot A \cdot N_u\right]} + B \cdot N_u \cdot (A + C)\right]^2}}{\sqrt{A^2 \cdot {N_u}^4 \cdot \left[\sqrt{{N_u}^2 \cdot \left[B \cdot (A + C) - 2 \cdot A \cdot N_u\right] \cdot \left[B \cdot (A + C) + 2 \cdot A \cdot N_u\right]} + A \cdot B \cdot N_u + B \cdot C \cdot N_u\right]}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:
$$\frac{N_u^{\,2}\cdot\sqrt{\left[2\cdot N_u+\sqrt{-N_u^{\,2}\cdot\left(2\cdot N_u-2\right)\cdot\left(2\cdot N_u+2\right)}\right]^2}}{\sqrt{N_u^{\,4}\cdot\left[2\cdot N_u+\sqrt{-N_u^{\,2}\cdot\left(2\cdot N_u-2\right)\cdot\left(2\cdot N_u+2\right)}\right]}}$$

1, 0, 0:
$$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left[\sqrt{N_u^{\,2}\cdot\left(A-2\cdot A\cdot N_u+1\right)\cdot\left(A+2\cdot A\cdot N_u+1\right)}+N_u\cdot(A+1)\right]^2}}{\sqrt{A^2\cdot N_u^{\,4}\cdot\left[N_u+A\cdot N_u+\sqrt{N_u^{\,2}\cdot\left(A-2\cdot A\cdot N_u+1\right)\cdot\left(A+2\cdot A\cdot N_u+1\right)}\right]}}$$

0, 2, 0:
$$\frac{N_u^{\,2}\cdot\sqrt{\left[2\cdot B\cdot N_u+\sqrt{N_u^{\,2}\cdot\left(2\cdot B-2\cdot N_u\right)\cdot\left(2\cdot B+2\cdot N_u\right)}\right]^2}}{\sqrt{N_u^{\,4}\cdot\left[2\cdot B\cdot N_u+\sqrt{N_u^{\,2}\cdot\left(2\cdot B-2\cdot N_u\right)\cdot\left(2\cdot B+2\cdot N_u\right)}\right]}}$$

1, 2, 0:
$$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left[\sqrt{N_u^{\,2}\cdot\left[B\cdot(A+1)-2\cdot A\cdot N_u\right]\cdot\left[2\cdot A\cdot N_u+B\cdot(A+1)\right]}+B\cdot N_u\cdot(A+1)\right]^2}}{\sqrt{A^2\cdot N_u^{\,4}\cdot\left[B\cdot N_u+\sqrt{N_u^{\,2}\cdot\left[B\cdot(A+1)-2\cdot A\cdot N_u\right]\cdot\left[2\cdot A\cdot N_u+B\cdot(A+1)\right]}+A\cdot B\cdot N_u\right]}}$$

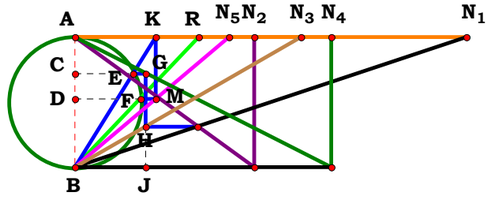
0, 0, 3:
$$\frac{N_u^{\,2}\cdot\sqrt{\left[\sqrt{N_u^{\,2}\cdot\left(C-2\cdot N_u+1\right)\cdot\left(C+2\cdot N_u+1\right)}+N_u\cdot(C+1)\right]^2}}{\sqrt{N_u^{\,4}\cdot\left[N_u+\sqrt{N_u^{\,2}\cdot\left(C-2\cdot N_u+1\right)\cdot\left(C+2\cdot N_u+1\right)}+C\cdot N_u\right]}}$$

1, 0, 3:
$$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left[\sqrt{N_u^{\,2}\cdot\left(A+C-2\cdot A\cdot N_u\right)\cdot\left(A+C+2\cdot A\cdot N_u\right)}+N_u\cdot(A+C)\right]^2}}{\sqrt{A^2\cdot N_u^{\,4}\cdot\left[\sqrt{N_u^{\,2}\cdot\left(A+C-2\cdot A\cdot N_u\right)\cdot\left(A+C+2\cdot A\cdot N_u\right)}+A\cdot N_u+C\cdot N_u\right]}}$$

0, 2, 3:
$$\frac{N_u^{\,2}\cdot\sqrt{\left[\sqrt{-N_u^{\,2}\cdot\left[2\cdot N_u+B\cdot(C+1)\right]\cdot\left[2\cdot N_u-B\cdot(C+1)\right]}+B\cdot N_u\cdot(C+1)\right]^2}}{\sqrt{N_u^{\,4}\cdot\left[\sqrt{-N_u^{\,2}\cdot\left[2\cdot N_u+B\cdot(C+1)\right]\cdot\left[2\cdot N_u-B\cdot(C+1)\right]}+B\cdot N_u+B\cdot C\cdot N_u\right]}}$$

1, 2, 3:
$$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left[\sqrt{N_u^{\,2}\cdot\left[B\cdot(A+C)-2\cdot A\cdot N_u\right]\cdot\left[B\cdot(A+C)+2\cdot A\cdot N_u\right]}+B\cdot N_u\cdot(A+C)\right]^2}}{\sqrt{A^2\cdot N_u^{\,4}\cdot\left[\sqrt{N_u^{\,2}\cdot\left[B\cdot(A+C)-2\cdot A\cdot N_u\right]\cdot\left[B\cdot(A+C)+2\cdot A\cdot N_u\right]}+A\cdot B\cdot N_u+B\cdot C\cdot N_u\right]}}$$

2SMT6R1



$N_1 = 3.00000$
$N_2 = 1.37279$
$N_3 = 1.73589$
$N_4 = 1.96599$
$N_5 = 1.17758$
$R = 0.94950$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 1.37279$ $N_3 := 1.73589$ $N_4 := 1.96599$ $N_5 := 1.17758$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{(A\cdot D)^{\frac{1}{4}}\cdot\sqrt{(A+B)\cdot\left[N_u\cdot\sqrt{A\cdot(C-D)+B\cdot C}-E\cdot\sqrt{A\cdot D}\right]}\cdot[A\cdot(C-D)+B\cdot C]\cdot\sqrt{A\cdot B\cdot D}}{A\cdot D\cdot\sqrt{B\cdot E}\cdot\sqrt{A+B}\cdot\sqrt{A\cdot(C-D)+B\cdot C}} = 0.9495$$

$$Num := \frac{(A\cdot D)^{\frac{1}{4}}\cdot\sqrt{(A+B)\cdot\left[N_u\cdot\sqrt{A\cdot(C-D)+B\cdot C}-E\cdot\sqrt{A\cdot D}\right]}\cdot[A\cdot(C-D)+B\cdot C]\cdot\sqrt{A\cdot B\cdot D}}{\sqrt{\left[(A\cdot D)^{\frac{1}{4}}\cdot\sqrt{(A+B)\cdot\left[N_u\cdot\sqrt{A\cdot(C-D)+B\cdot C}-E\cdot\sqrt{A\cdot D}\right]}\cdot[A\cdot(C-D)+B\cdot C]\cdot\sqrt{A\cdot B\cdot D}\right]^2}}$$

$$Den := \frac{A\cdot D\cdot\sqrt{B\cdot E}\cdot\sqrt{A+B}\cdot\sqrt{A\cdot(C-D)+B\cdot C}}{\sqrt{\left[A\cdot D\cdot\sqrt{B\cdot E}\cdot\sqrt{A+B}\cdot\sqrt{A\cdot(C-D)+B\cdot C}\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{(A\cdot D)^{\frac{1}{4}}\cdot\sqrt{(A+B)\cdot\left[N_u\cdot\sqrt{B\cdot C+A\cdot(C-D)}-E\cdot\sqrt{A\cdot D}\right]}\cdot[B\cdot C+A\cdot(C-D)]\cdot\sqrt{A\cdot B\cdot D}\cdot\sqrt{A^2\cdot B\cdot D^2\cdot E\cdot(A+B)\cdot[B\cdot C+A\cdot(C-D)]}}{A\cdot D\cdot\sqrt{B\cdot E}\cdot\sqrt{A+B}\cdot\sqrt{B\cdot C+A\cdot(C-D)}\cdot\sqrt{A\cdot B\cdot D\cdot\sqrt{A\cdot D}\cdot(A+B)\cdot\left[N_u\cdot\sqrt{B\cdot C+A\cdot(C-D)}-E\cdot\sqrt{A\cdot D}\right]\cdot[B\cdot C+A\cdot(C-D)]}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: 1

1, 0, 0, 0, 0:

$$\frac{\sqrt{A^2\cdot(A+1)}\cdot\sqrt{(A+1)\cdot\left(N_u-\sqrt{A}\right)}}{A^{\frac{1}{4}}\cdot\sqrt{A+1}\cdot\sqrt{A^{\frac{3}{2}}\cdot(A+1)\cdot\left(N_u-\sqrt{A}\right)}}$$

0, 2, 0, 0, 0:

$$\frac{\sqrt{B^2\cdot(B+1)}\cdot\sqrt{B\cdot(B+1)\cdot\left(\sqrt{B}\cdot N_u-1\right)}}{\sqrt{B}\cdot\sqrt{B+1}\cdot\sqrt{B^2\cdot(B+1)\cdot\left(\sqrt{B}\cdot N_u-1\right)}}$$

1, 2, 0, 0, 0:

$$\frac{\sqrt{A\cdot B}\cdot\sqrt{A^2\cdot B^2\cdot(A+B)}\cdot\sqrt{-B\cdot\left(\sqrt{A}-\sqrt{B}\cdot N_u\right)\cdot(A+B)}}{A^{\frac{3}{4}}\cdot B\cdot\sqrt{A+B}\cdot\sqrt{-A^{\frac{3}{2}}\cdot B^2\cdot\left(\sqrt{A}-\sqrt{B}\cdot N_u\right)\cdot(A+B)}}$$

0, 0, 3, 0, 0: 1

1, 0, 3, 0, 0:

$$\frac{\sqrt{-\left[\sqrt{A}-N_u\cdot\sqrt{C+A\cdot(C-1)}\right]\cdot(A+1)\cdot[C+A\cdot(C-1)]}\cdot\sqrt{A^2\cdot(A+1)\cdot[C+A\cdot(C-1)]}}{A^{\frac{1}{4}}\cdot\sqrt{A+1}\cdot\sqrt{C+A\cdot(C-1)}\cdot\sqrt{-A^{\frac{3}{2}}\cdot\left[\sqrt{A}-N_u\cdot\sqrt{C+A\cdot(C-1)}\right]\cdot(A+1)\cdot[C+A\cdot(C-1)]}}$$

0, 2, 3, 0, 0:

$$\frac{\sqrt{B\cdot(B+1)\cdot(C+B\cdot C-1)}\cdot\sqrt{(B+1)\cdot\left(N_u\cdot\sqrt{C+B\cdot C-1}-1\right)\cdot(C+B\cdot C-1)}}{\sqrt{B+1}\cdot\sqrt{C+B\cdot C-1}\cdot\sqrt{B\cdot(B+1)\cdot\left(N_u\cdot\sqrt{C+B\cdot C-1}-1\right)\cdot(C+B\cdot C-1)}}$$

1, 2, 3, 0, 0:

$$\frac{\sqrt{A\cdot B}\cdot\sqrt{-[B\cdot C+A\cdot(C-1)]\cdot(A+B)\cdot\left[\sqrt{A}-N_u\cdot\sqrt{B\cdot C+A\cdot(C-1)}\right]}\cdot\sqrt{A^2\cdot B\cdot[B\cdot C+A\cdot(C-1)]\cdot(A+B)}}{A^{\frac{3}{4}}\cdot\sqrt{B}\cdot\sqrt{B\cdot C+A\cdot(C-1)}\cdot\sqrt{A+B}\cdot\sqrt{-A^{\frac{3}{2}}\cdot B\cdot[B\cdot C+A\cdot(C-1)]\cdot(A+B)\cdot\left[\sqrt{A}-N_u\cdot\sqrt{B\cdot C+A\cdot(C-1)}\right]}}$$

0, 0, 0, 4, 0:

$$\frac{\sqrt{2}\cdot\sqrt{-D^2\cdot(D-2)}\cdot\sqrt{(D-2)\cdot\left(2\cdot\sqrt{D}-2\cdot N_u\cdot\sqrt{2-D}\right)}}{2\cdot D^{\frac{1}{4}}\cdot\sqrt{2-D}\cdot\sqrt{D^{\frac{3}{2}}\cdot\left(\sqrt{D}-N_u\cdot\sqrt{2-D}\right)\cdot(D-2)}}$$

1, 0, 0, 4, 0:

$$\frac{(A\cdot D)^{\frac{3}{4}}\cdot\sqrt{-(A+1)\cdot[A\cdot(D-1)-1]\cdot\left[N_u\cdot\sqrt{1-A\cdot(D-1)}-\sqrt{A\cdot D}\right]}\cdot\sqrt{-A^2\cdot D^2\cdot(A+1)\cdot[A\cdot(D-1)-1]}}{A\cdot D\cdot\sqrt{A+1}\cdot\sqrt{1-A\cdot(D-1)}\cdot\sqrt{-A\cdot D\cdot(A+1)\cdot[A\cdot(D-1)-1]\cdot\sqrt{A\cdot D}\cdot\left[N_u\cdot\sqrt{1-A\cdot(D-1)}-\sqrt{A\cdot D}\right]}}$$

0, 2, 0, 4, 0:

$$\frac{\sqrt{B\cdot D}\cdot\sqrt{(B+1)\cdot\left(N_u\cdot\sqrt{B-D+1}-\sqrt{D}\right)\cdot(B-D+1)}\cdot\sqrt{B\cdot D^2\cdot(B+1)\cdot(B-D+1)}}{\sqrt{B}\cdot D^{\frac{3}{4}}\cdot\sqrt{B+1}\cdot\sqrt{B-D+1}\cdot\sqrt{B\cdot D^{\frac{3}{2}}\cdot(B+1)\cdot\left(N_u\cdot\sqrt{B-D+1}-\sqrt{D}\right)\cdot(B-D+1)}}$$

1, 2, 0, 4, 0:

$$\frac{(A\cdot D)^{\frac{1}{4}}\cdot\sqrt{\left[N_u\cdot\sqrt{B-A\cdot(D-1)}-\sqrt{A\cdot D}\right]\cdot(A+B)\cdot[B-A\cdot(D-1)]}\cdot\sqrt{A\cdot B\cdot D}\cdot\sqrt{A^2\cdot B\cdot D^2\cdot(A+B)\cdot[B-A\cdot(D-1)]}}{A\cdot\sqrt{B}\cdot D\cdot\sqrt{A+B}\cdot\sqrt{B-A\cdot(D-1)}\cdot\sqrt{A\cdot B\cdot D\cdot\left[N_u\cdot\sqrt{B-A\cdot(D-1)}-\sqrt{A\cdot D}\right]\cdot\sqrt{A\cdot D}\cdot(A+B)\cdot[B-A\cdot(D-1)]}}$$

0, 0, 3, 4, 0:

$$\frac{\sqrt{2}\cdot\sqrt{\left(2\cdot\sqrt{D}-2\cdot N_u\cdot\sqrt{2\cdot C-D}\right)\cdot(D-2\cdot C)}\cdot\sqrt{-D^2\cdot(D-2\cdot C)}}{2\cdot D^{\frac{1}{4}}\cdot\sqrt{2\cdot C-D}\cdot\sqrt{D^{\frac{3}{2}}\cdot\left(\sqrt{D}-N_u\cdot\sqrt{2\cdot C-D}\right)\cdot(D-2\cdot C)}}$$

1, 0, 3, 4, 0:

$$\frac{(A\cdot D)^{\frac{3}{4}}\cdot\sqrt{(A+1)\cdot[C+A\cdot(C-D)]\cdot\left[N_u\cdot\sqrt{C+A\cdot(C-D)}-\sqrt{A\cdot D}\right]}\cdot\sqrt{A^2\cdot D^2\cdot(A+1)\cdot[C+A\cdot(C-D)]}}{A\cdot D\cdot\sqrt{A+1}\cdot\sqrt{C+A\cdot(C-D)}\cdot\sqrt{A\cdot D\cdot(A+1)\cdot[C+A\cdot(C-D)]\cdot\sqrt{A\cdot D}\cdot\left[N_u\cdot\sqrt{C+A\cdot(C-D)}-\sqrt{A\cdot D}\right]}}$$

0, 2, 3, 4, 0:

$$\frac{\sqrt{B\cdot D}\cdot\sqrt{(B+1)\cdot\left(N_u\cdot\sqrt{C-D+B\cdot C}-\sqrt{D}\right)\cdot(C-D+B\cdot C)}\cdot\sqrt{B\cdot D^2\cdot(B+1)\cdot(C-D+B\cdot C)}}{\sqrt{B}\cdot D^{\frac{3}{4}}\cdot\sqrt{B+1}\cdot\sqrt{C-D+B\cdot C}\cdot\sqrt{B\cdot D^{\frac{3}{2}}\cdot(B+1)\cdot\left(N_u\cdot\sqrt{C-D+B\cdot C}-\sqrt{D}\right)\cdot(C-D+B\cdot C)}}$$

1, 2, 3, 4, 0:

$$\frac{(A\cdot D)^{\frac{1}{4}}\cdot\sqrt{(A+B)\cdot\left[N_u\cdot\sqrt{B\cdot C+A\cdot(C-D)}-\sqrt{A\cdot D}\right]\cdot[B\cdot C+A\cdot(C-D)]}\cdot\sqrt{A\cdot B\cdot D}\cdot\sqrt{A^2\cdot B\cdot D^2\cdot(A+B)\cdot[B\cdot C+A\cdot(C-D)]}}{A\cdot\sqrt{B}\cdot D\cdot\sqrt{A+B}\cdot\sqrt{B\cdot C+A\cdot(C-D)}\cdot\sqrt{A\cdot B\cdot D\cdot\sqrt{A\cdot D}\cdot(A+B)\cdot\left[N_u\cdot\sqrt{B\cdot C+A\cdot(C-D)}-\sqrt{A\cdot D}\right]\cdot[B\cdot C+A\cdot(C-D)]}}$$

0, 0, 0, 0, 5: 1

1, 0, 0, 0, 5: $$\frac{\sqrt{(A+1)\cdot\left(N_u-\sqrt{A}\cdot E\right)}\cdot\sqrt{A^2\cdot E\cdot(A+1)}}{A^{\frac{1}{4}}\cdot\sqrt{E}\cdot\sqrt{A+1}\cdot\sqrt{A^{\frac{3}{2}}\cdot(A+1)\cdot\left(N_u-\sqrt{A}\cdot E\right)}}$$

0, 2, 0, 0, 5: $$\frac{\sqrt{-B\cdot(B+1)\cdot\left(E-\sqrt{B}\cdot N_u\right)}\cdot\sqrt{B^2\cdot E\cdot(B+1)}}{\sqrt{B+1}\cdot\sqrt{B\cdot E}\cdot\sqrt{-B^2\cdot(B+1)\cdot\left(E-\sqrt{B}\cdot N_u\right)}}$$

1, 2, 0, 0, 5: $$\frac{\sqrt{A\cdot B}\cdot\sqrt{-B\cdot(A+B)\cdot\left(\sqrt{A}\cdot E-\sqrt{B}\cdot N_u\right)}\cdot\sqrt{A^2\cdot B^2\cdot E\cdot(A+B)}}{A^{\frac{3}{4}}\cdot\sqrt{B}\cdot\sqrt{B\cdot E}\cdot\sqrt{A+B}\cdot\sqrt{-A^{\frac{3}{2}}\cdot B^2\cdot(A+B)\cdot\left(\sqrt{A}\cdot E-\sqrt{B}\cdot N_u\right)}}$$

0, 0, 3, 0, 5: $$\frac{\sqrt{E\cdot(2\cdot C-1)}}{\sqrt{E}\cdot\sqrt{2\cdot C-1}}$$

1, 0, 3, 0, 5: $$\frac{\sqrt{(A+1)\cdot[C+A\cdot(C-1)]}\cdot\left[N_u\cdot\sqrt{C+A\cdot(C-1)}-\sqrt{A}\cdot E\right]\cdot\sqrt{A^2\cdot E\cdot(A+1)\cdot[C+A\cdot(C-1)]}}{A^{\frac{1}{4}}\cdot\sqrt{E}\cdot\sqrt{A+1}\cdot\sqrt{C+A\cdot(C-1)}\cdot\sqrt{A^{\frac{3}{2}}\cdot(A+1)\cdot[C+A\cdot(C-1)]\cdot\left[N_u\cdot\sqrt{C+A\cdot(C-1)}-\sqrt{A}\cdot E\right]}}$$

0, 2, 3, 0, 5: $$\frac{\sqrt{B}\cdot\sqrt{-\left(E-N_u\cdot\sqrt{C+B\cdot C-1}\right)\cdot(B+1)\cdot(C+B\cdot C-1)}\cdot\sqrt{B\cdot E\cdot(B+1)\cdot(C+B\cdot C-1)}}{\sqrt{B+1}\cdot\sqrt{B\cdot E}\cdot\sqrt{C+B\cdot C-1}\cdot\sqrt{-B\cdot\left(E-N_u\cdot\sqrt{C+B\cdot C-1}\right)\cdot(B+1)\cdot(C+B\cdot C-1)}}$$

1, 2, 3, 0, 5: $$\frac{\sqrt{A\cdot B}\cdot\sqrt{[B\cdot C+A\cdot(C-1)]\cdot\left[N_u\cdot\sqrt{B\cdot C+A\cdot(C-1)}-\sqrt{A}\cdot E\right]\cdot(A+B)}\cdot\sqrt{A^2\cdot B\cdot E\cdot[B\cdot C+A\cdot(C-1)]\cdot(A+B)}}{A^{\frac{3}{4}}\cdot\sqrt{B\cdot C+A\cdot(C-1)}\cdot\sqrt{B\cdot E}\cdot\sqrt{A+B}\cdot\sqrt{A^{\frac{3}{2}}\cdot B\cdot[B\cdot C+A\cdot(C-1)]\cdot\left[N_u\cdot\sqrt{B\cdot C+A\cdot(C-1)}-\sqrt{A}\cdot E\right]\cdot(A+B)}}$$

0, 0, 0, 4, 5:

$$\frac{\sqrt{2}\cdot\sqrt{-(D-2)\cdot\left(2\cdot N_u\cdot\sqrt{2-D}-2\cdot\sqrt{D}\cdot E\right)}\cdot\sqrt{-D^2\cdot E\cdot(D-2)}}{2\cdot D^{\frac{1}{4}}\cdot\sqrt{E}\cdot\sqrt{2-D}\cdot\sqrt{-D^{\frac{3}{2}}\cdot(D-2)\cdot\left(N_u\cdot\sqrt{2-D}-\sqrt{D}\cdot E\right)}}$$

1, 0, 0, 4, 5:

$$\frac{(A\cdot D)^{\frac{3}{4}}\cdot\sqrt{-\left[N_u\cdot\sqrt{1-A\cdot(D-1)}-E\cdot\sqrt{A\cdot D}\right]\cdot(A+1)\cdot[A\cdot(D-1)-1]}\cdot\sqrt{-A^2\cdot D^2\cdot E\cdot(A+1)\cdot[A\cdot(D-1)-1]}}{A\cdot D\cdot\sqrt{E}\cdot\sqrt{A+1}\cdot\sqrt{1-A\cdot(D-1)}\cdot\sqrt{-A\cdot D\cdot\left[N_u\cdot\sqrt{1-A\cdot(D-1)}-E\cdot\sqrt{A\cdot D}\right]\cdot(A+1)\cdot[A\cdot(D-1)-1]}\cdot\sqrt{A\cdot D}}$$

0, 2, 0, 4, 5:

$$\frac{\sqrt{B\cdot D}\cdot\sqrt{\left(N_u\cdot\sqrt{B-D+1}-\sqrt{D}\cdot E\right)\cdot(B+1)\cdot(B-D+1)}\cdot\sqrt{B\cdot D^2\cdot E\cdot(B+1)\cdot(B-D+1)}}{D^{\frac{3}{4}}\cdot\sqrt{B+1}\cdot\sqrt{B\cdot E}\cdot\sqrt{B-D+1}\cdot\sqrt{B\cdot D^{\frac{3}{2}}\cdot\left(N_u\cdot\sqrt{B-D+1}-\sqrt{D}\cdot E\right)\cdot(B+1)\cdot(B-D+1)}}$$

1, 2, 0, 4, 5:

$$\frac{(A\cdot D)^{\frac{1}{4}}\cdot\sqrt{A\cdot B\cdot D}\cdot\sqrt{-\left[E\cdot\sqrt{A\cdot D}-N_u\cdot\sqrt{B-A\cdot(D-1)}\right]\cdot(A+B)\cdot[B-A\cdot(D-1)]}\cdot\sqrt{A^2\cdot B\cdot D^2\cdot E\cdot(A+B)\cdot[B-A\cdot(D-1)]}}{A\cdot D\cdot\sqrt{B\cdot E}\cdot\sqrt{A+B}\cdot\sqrt{B-A\cdot(D-1)}\cdot\sqrt{-A\cdot B\cdot D\cdot\left[E\cdot\sqrt{A\cdot D}-N_u\cdot\sqrt{B-A\cdot(D-1)}\right]}\cdot\sqrt{A\cdot D}\cdot(A+B)\cdot[B-A\cdot(D-1)]}$$

0, 0, 3, 4, 5:

$$\frac{\sqrt{2}\cdot\sqrt{-\left(2\cdot N_u\cdot\sqrt{2\cdot C-D}-2\cdot\sqrt{D}\cdot E\right)\cdot(D-2\cdot C)}\cdot\sqrt{-D^2\cdot E\cdot(D-2\cdot C)}}{2\cdot D^{\frac{1}{4}}\cdot\sqrt{E}\cdot\sqrt{2\cdot C-D}\cdot\sqrt{-D^{\frac{3}{2}}\cdot\left(N_u\cdot\sqrt{2\cdot C-D}-\sqrt{D}\cdot E\right)\cdot(D-2\cdot C)}}$$

1, 0, 3, 4, 5:

$$\frac{(A\cdot D)^{\frac{3}{4}}\cdot\sqrt{\left[N_u\cdot\sqrt{C+A\cdot(C-D)}-E\cdot\sqrt{A\cdot D}\right]\cdot(A+1)\cdot[C+A\cdot(C-D)]}\cdot\sqrt{A^2\cdot D^2\cdot E\cdot(A+1)\cdot[C+A\cdot(C-D)]}}{A\cdot D\cdot\sqrt{E}\cdot\sqrt{A+1}\cdot\sqrt{C+A\cdot(C-D)}\cdot\sqrt{A\cdot D\cdot\left[N_u\cdot\sqrt{C+A\cdot(C-D)}-E\cdot\sqrt{A\cdot D}\right]\cdot(A+1)\cdot[C+A\cdot(C-D)]}\cdot\sqrt{A\cdot D}}$$

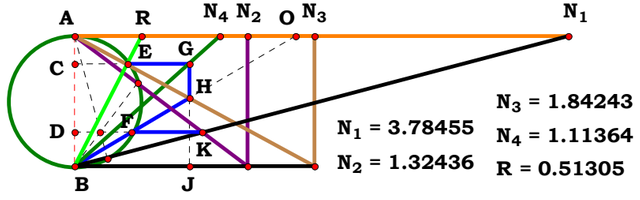
0, 2, 3, 4, 5:

$$\frac{\sqrt{B\cdot D}\cdot\sqrt{(B+1)\cdot\left(N_u\cdot\sqrt{C-D+B\cdot C}-\sqrt{D}\cdot E\right)\cdot(C-D+B\cdot C)}\cdot\sqrt{B\cdot D^2\cdot E\cdot(B+1)\cdot(C-D+B\cdot C)}}{D^{\frac{3}{4}}\cdot\sqrt{B+1}\cdot\sqrt{B\cdot E}\cdot\sqrt{C-D+B\cdot C}\cdot\sqrt{B\cdot D^{\frac{3}{2}}\cdot(B+1)\cdot\left(N_u\cdot\sqrt{C-D+B\cdot C}-\sqrt{D}\cdot E\right)\cdot(C-D+B\cdot C)}}$$

1, 2, 3, 4, 5:

$$\frac{(A\cdot D)^{\frac{1}{4}}\cdot\sqrt{(A+B)\cdot\left[N_u\cdot\sqrt{B\cdot C+A\cdot(C-D)}-E\cdot\sqrt{A\cdot D}\right]\cdot[B\cdot C+A\cdot(C-D)]}\cdot\sqrt{A\cdot B\cdot D}\cdot\sqrt{A^2\cdot B\cdot D^2\cdot E\cdot(A+B)\cdot[B\cdot C+A\cdot(C-D)]}}{A\cdot D\cdot\sqrt{B\cdot E}\cdot\sqrt{A+B}\cdot\sqrt{B\cdot C+A\cdot(C-D)}\cdot\sqrt{A\cdot B\cdot D\cdot\sqrt{A\cdot D}\cdot(A+B)\cdot\left[N_u\cdot\sqrt{B\cdot C+A\cdot(C-D)}-E\cdot\sqrt{A\cdot D}\right]\cdot[B\cdot C+A\cdot(C-D)]}}$$

2SMT6R2



Unit. $AB := 1$ Given. $N_1 := 3.78455$ $N_2 := 1.32436$ $N_3 := 1.84243$

$N_4 := 1.11364$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{(A \cdot B)^{\frac{1}{4}} \cdot \sqrt{A \cdot N_u + \sqrt{A \cdot B} \cdot (C - D)}}{\sqrt{B} \cdot \sqrt{A \cdot D}} = 0.513051$$

$$Num := \frac{(A \cdot B)^{\frac{1}{4}} \cdot \sqrt{A \cdot N_u + \sqrt{A \cdot B} \cdot (C - D)}}{\sqrt{\left[(A \cdot B)^{\frac{1}{4}} \cdot \sqrt{A \cdot N_u + \sqrt{A \cdot B} \cdot (C - D)}\right]^2}} \qquad Den := \frac{\sqrt{B} \cdot \sqrt{A \cdot D}}{\sqrt{\left(\sqrt{B} \cdot \sqrt{A \cdot D}\right)^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A \cdot N_u + \sqrt{A \cdot B} \cdot (C - D)} \cdot (A \cdot B)^{\frac{1}{4}} \cdot \sqrt{A \cdot B \cdot D}}{\sqrt{B} \cdot \sqrt{\left[A \cdot N_u + \sqrt{A \cdot B} \cdot (C - D)\right]} \cdot \sqrt{A \cdot B} \cdot \sqrt{A \cdot D}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 1

1, 0, 0, 0: $\frac{\sqrt{\sqrt{A}}\cdot\sqrt{A\cdot N_u}}{\sqrt{A^{\frac{3}{2}}\cdot N_u}}$

0, 2, 0, 0: $\frac{\sqrt{\sqrt{B}}\cdot\sqrt{N_u}}{\sqrt{\sqrt{B}\cdot N_u}}$

1, 2, 0, 0: $\frac{(A\cdot B)^{\frac{3}{4}}\cdot\sqrt{A\cdot N_u}}{\sqrt{A}\cdot\sqrt{B}\cdot\sqrt{A\cdot N_u\cdot\sqrt{A\cdot B}}}$

0, 0, 3, 0: 1

1, 0, 3, 0: $\frac{\sqrt{\sqrt{A}\cdot\sqrt{\sqrt{A}\cdot(C-1)+A\cdot N_u}}}{\sqrt{\sqrt{A}\cdot\left[\sqrt{A}\cdot(C-1)+A\cdot N_u\right]}}$

0, 2, 3, 0: $\frac{\sqrt{\sqrt{B}\cdot\sqrt{N_u+\sqrt{B}\cdot(C-1)}}}{\sqrt{\sqrt{B}\cdot\left[N_u+\sqrt{B}\cdot(C-1)\right]}}$

1, 2, 3, 0: $\frac{(A\cdot B)^{\frac{3}{4}}\cdot\sqrt{(C-1)\cdot\sqrt{A\cdot B}+A\cdot N_u}}{\sqrt{A}\cdot\sqrt{B}\cdot\sqrt{\sqrt{A\cdot B}\cdot\left[(C-1)\cdot\sqrt{A\cdot B}+A\cdot N_u\right]}}$

0, 0, 0, 4: 1

1, 0, 0, 4: $\frac{\sqrt{\sqrt{A}\cdot\sqrt{A\cdot N_u-\sqrt{A}\cdot(D-1)}}}{\sqrt{-\sqrt{A}\cdot\left[\sqrt{A}\cdot(D-1)-A\cdot N_u\right]}}$

0, 2, 0, 4: $\frac{\sqrt{N_u-\sqrt{B}\cdot(D-1)}\cdot\sqrt{B\cdot D}}{\sqrt{\sqrt{B}\cdot\sqrt{D}\cdot\sqrt{\sqrt{B}\cdot\left[N_u-\sqrt{B}\cdot(D-1)\right]}}}$

1, 2, 0, 4: $\frac{\sqrt{\sqrt{A\cdot B}\cdot\sqrt{A\cdot N_u-(D-1)\cdot\sqrt{A\cdot B}}\cdot\sqrt{A\cdot B\cdot D}}}{\sqrt{B}\cdot\sqrt{-\sqrt{A\cdot B}\cdot\left[(D-1)\cdot\sqrt{A\cdot B}-A\cdot N_u\right]}\cdot\sqrt{A\cdot D}}$

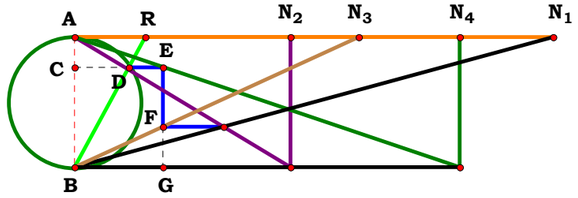
0, 0, 3, 4: 1

1, 0, 3, 4: $\frac{\sqrt{\sqrt{A}\cdot\sqrt{\sqrt{A}\cdot(C-D)+A\cdot N_u}}}{\sqrt{\sqrt{A}\cdot\left[\sqrt{A}\cdot(C-D)+A\cdot N_u\right]}}$

0, 2, 3, 4: $\frac{\sqrt{B\cdot D}\cdot\sqrt{N_u+\sqrt{B}\cdot(C-D)}}{\sqrt{\sqrt{B}\cdot\sqrt{D}\cdot\sqrt{\sqrt{B}\cdot\left[N_u+\sqrt{B}\cdot(C-D)\right]}}}$

1, 2, 3, 4: $\frac{\sqrt{A\cdot N_u+\sqrt{A\cdot B}\cdot(C-D)}\cdot\sqrt{\sqrt{A\cdot B}\cdot\sqrt{A\cdot B\cdot D}}}{\sqrt{B}\cdot\sqrt{\left[A\cdot N_u+\sqrt{A\cdot B}\cdot(C-D)\right]}\cdot\sqrt{A\cdot B}\cdot\sqrt{A\cdot D}}$

2SMT6R3



$N_1 = 3.66832$
$N_2 = 1.65368$
$N_3 = 2.18144$
$N_4 = 2.95394$
$R = 0.54571$

Unit. $AB := 1$ Given. $N_1 := 3.66832$ $N_2 := 1.65368$ $N_3 := 2.18144$ $N_4 := 2.95394$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot D}{\sqrt{A \cdot D} \cdot \sqrt{A \cdot C - A \cdot D + B \cdot C}} = 0.545712$$

$$Num := \frac{A \cdot D}{\sqrt{(A \cdot D)^2}}$$

$$Den := \frac{\sqrt{A \cdot D} \cdot \sqrt{A \cdot C - A \cdot D + B \cdot C}}{\sqrt{\left(\sqrt{A \cdot D} \cdot \sqrt{A \cdot C - A \cdot D + B \cdot C}\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot D \cdot \sqrt{A \cdot D \cdot (A \cdot C - A \cdot D + B \cdot C)}}{\sqrt{A^2 \cdot D^2} \cdot \sqrt{A \cdot D} \cdot \sqrt{A \cdot C - A \cdot D + B \cdot C}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 1

1, 0, 0, 0: $\frac{A}{\sqrt{A^2}}$

0, 2, 0, 0: 1

1, 2, 0, 0: $\frac{\sqrt{A}\cdot\sqrt{A\cdot B}}{\sqrt{B}\cdot\sqrt{A^2}}$

0, 0, 3, 0: 1

1, 0, 3, 0: $\frac{\sqrt{A}\cdot\sqrt{A\cdot(C-A+A\cdot C)}}{\sqrt{A^2}\cdot\sqrt{C-A+A\cdot C}}$

0, 2, 3, 0: 1

1, 2, 3, 0: $\frac{\sqrt{A}\cdot\sqrt{A\cdot(A\cdot C-A+B\cdot C)}}{\sqrt{A^2}\cdot\sqrt{A\cdot C-A+B\cdot C}}$

0, 0, 0, 4: $\frac{\sqrt{D}\cdot\sqrt{-D\cdot(D-2)}}{\sqrt{2-D}\cdot\sqrt{D^2}}$

1, 0, 0, 4: $\frac{A\cdot D\cdot\sqrt{A\cdot D\cdot(A-A\cdot D+1)}}{\sqrt{A^2\cdot D^2}\cdot\sqrt{A\cdot D}\cdot\sqrt{A-A\cdot D+1}}$

0, 2, 0, 4: $\frac{\sqrt{D}\cdot\sqrt{D\cdot(B-D+1)}}{\sqrt{D^2}\cdot\sqrt{B-D+1}}$

1, 2, 0, 4: $\frac{A\cdot D\cdot\sqrt{A\cdot D\cdot(A+B-A\cdot D)}}{\sqrt{A^2\cdot D^2}\cdot\sqrt{A\cdot D}\cdot\sqrt{A+B-A\cdot D}}$

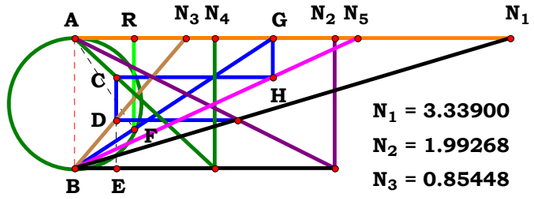
0, 0, 3, 4: $\frac{\sqrt{D}\cdot\sqrt{-D\cdot(D-2\cdot C)}}{\sqrt{D^2}\cdot\sqrt{2\cdot C-D}}$

1, 0, 3, 4: $\frac{A\cdot D\cdot\sqrt{A\cdot D\cdot(C+A\cdot C-A\cdot D)}}{\sqrt{A^2\cdot D^2}\cdot\sqrt{A\cdot D}\cdot\sqrt{C+A\cdot C-A\cdot D}}$

0, 2, 3, 4: $\frac{\sqrt{D}\cdot\sqrt{D\cdot(C-D+B\cdot C)}}{\sqrt{D^2}\cdot\sqrt{C-D+B\cdot C}}$

1, 2, 3, 4: $\frac{A\cdot D\cdot\sqrt{A\cdot D\cdot(A\cdot C-A\cdot D+B\cdot C)}}{\sqrt{A^2\cdot D^2}\cdot\sqrt{A\cdot D}\cdot\sqrt{A\cdot C-A\cdot D+B\cdot C}}$

2SMT6R4



$N_1 = 3.33900$ $N_4 = 1.07489$

$N_2 = 1.99268$ $N_5 = 2.16553$

$N_3 = 0.85448$ $R = 0.45890$

Unit. $AB := 1$ **Given.** $N_1 := 3.33900$ $N_2 := 1.99268$ $N_3 := .85448$

$N_4 := 1.07489$ $N_5 := 2.16553$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{C \cdot E \cdot N_u \cdot (A+B) \cdot (A \cdot C - A \cdot D + B \cdot C)}{C^2 \cdot \left(E^2 + N_u^2\right) \cdot (A+B)^2 - 2 \cdot A \cdot C \cdot D \cdot N_u^2 \cdot (A+B) + A^2 \cdot D^2 \cdot N_u^2} = 0.458903$$

$$Num := \frac{C \cdot E \cdot N_u \cdot (A+B) \cdot (A \cdot C - A \cdot D + B \cdot C)}{\sqrt{\left[C \cdot E \cdot N_u \cdot (A+B) \cdot (A \cdot C - A \cdot D + B \cdot C)\right]^2}}$$

$$Den := \frac{C^2 \cdot \left(E^2 + N_u^2\right) \cdot (A+B)^2 - 2 \cdot A \cdot C \cdot D \cdot N_u^2 \cdot (A+B) + A^2 \cdot D^2 \cdot N_u^2}{\sqrt{\left[C^2 \cdot \left(E^2 + N_u^2\right) \cdot (A+B)^2 - 2 \cdot A \cdot C \cdot D \cdot N_u^2 \cdot (A+B) + A^2 \cdot D^2 \cdot N_u^2\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot E \cdot N_u \cdot (A+B) \cdot \sqrt{\left[C^2 \cdot \left(E^2 + N_u^2\right) \cdot (A+B)^2 + A^2 \cdot D^2 \cdot N_u^2 - 2 \cdot A \cdot C \cdot D \cdot N_u^2 \cdot (A+B)\right]^2} \cdot (A \cdot C - A \cdot D + B \cdot C)}{\left[A^2 \cdot C \cdot \left(C \cdot E^2 + C \cdot N_u^2 - 2 \cdot D \cdot N_u^2\right) + A^2 \cdot D^2 \cdot N_u^2 + 2 \cdot A \cdot B \cdot C \cdot \left(C \cdot E^2 + C \cdot N_u^2 - D \cdot N_u^2\right) + B^2 \cdot C^2 \cdot \left(E^2 + N_u^2\right)\right] \cdot \sqrt{C^2 \cdot E^2 \cdot N_u^2 \cdot (A+B)^2 \cdot (A \cdot C - A \cdot D + B \cdot C)^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0:

$$\frac{N_u \cdot \sqrt{\left(N_u^2+4\right)^2}}{\sqrt{N_u^2}\cdot\left(N_u^2+4\right)}$$

1, 0, 0, 0, 0:

$$\frac{N_u\cdot(A+1)\cdot\sqrt{\left[(A+1)^2\cdot\left(N_u^2+1\right)+A^2\cdot N_u^2-2\cdot A\cdot N_u^2\cdot(A+1)\right]^2}}{\sqrt{N_u^2\cdot(A+1)^2}\cdot\left[2\cdot A+N_u^2+A^2\cdot N_u^2-A^2\cdot\left(N_u^2-1\right)+1\right]}$$

0, 2, 0, 0, 0:

$$\frac{B\cdot N_u\cdot(B+1)\cdot\sqrt{\left[N_u^2+(B+1)^2\cdot\left(N_u^2+1\right)-2\cdot N_u^2\cdot(B+1)\right]^2}}{\left[\left(N_u^2+1\right)\cdot B^2+2\cdot B+1\right]\cdot\sqrt{B^2\cdot N_u^2\cdot(B+1)^2}}$$

1, 2, 0, 0, 0:

$$\frac{B\cdot N_u\cdot(A+B)\cdot\sqrt{\left[A^2\cdot N_u^2+(A+B)^2\cdot\left(N_u^2+1\right)-2\cdot A\cdot N_u^2\cdot(A+B)\right]^2}}{\sqrt{B^2\cdot N_u^2\cdot(A+B)^2}\cdot\left[A^2\cdot N_u^2+2\cdot A\cdot B-A^2\cdot\left(N_u^2-1\right)+B^2\cdot\left(N_u^2+1\right)\right]}$$

0, 0, 3, 0, 0:

$$\frac{C\cdot N_u\cdot\sqrt{\left[N_u^2+4\cdot C^2\cdot\left(N_u^2+1\right)-4\cdot C\cdot N_u^2\right]^2}\cdot(2\cdot C-1)}{\sqrt{C^2\cdot N_u^2\cdot(2\cdot C-1)^2}\cdot\left[N_u^2+2\cdot C\cdot\left(C-N_u^2+C\cdot N_u^2\right)+C\cdot\left(C-2\cdot N_u^2+C\cdot N_u^2\right)+C^2\cdot\left(N_u^2+1\right)\right]}$$

1, 0, 3, 0, 0:

$$\frac{C\cdot N_u\cdot(A+1)\cdot\sqrt{\left[A^2\cdot N_u^2+C^2\cdot(A+1)^2\cdot\left(N_u^2+1\right)-2\cdot A\cdot C\cdot N_u^2\cdot(A+1)\right]^2}\cdot(C-A+A\cdot C)}{\left[A^2\cdot N_u^2+C^2\cdot\left(N_u^2+1\right)+A^2\cdot C\cdot\left(C-2\cdot N_u^2+C\cdot N_u^2\right)+2\cdot A\cdot C\cdot\left(C-N_u^2+C\cdot N_u^2\right)\right]\cdot\sqrt{C^2\cdot N_u^2\cdot(A+1)^2\cdot(C-A+A\cdot C)^2}}$$

0, 2, 3, 0, 0:

$$\frac{C\cdot N_u\cdot(B+1)\cdot\sqrt{\left[N_u^2+C^2\cdot(B+1)^2\cdot\left(N_u^2+1\right)-2\cdot C\cdot N_u^2\cdot(B+1)\right]^2}\cdot(C+B\cdot C-1)}{\left[N_u^2+C\cdot\left(C-2\cdot N_u^2+C\cdot N_u^2\right)+B^2\cdot C^2\cdot\left(N_u^2+1\right)+2\cdot B\cdot C\cdot\left(C-N_u^2+C\cdot N_u^2\right)\right]\cdot\sqrt{C^2\cdot N_u^2\cdot(B+1)^2\cdot(C+B\cdot C-1)^2}}$$

1, 2, 3, 0, 0:

$$\frac{C\cdot N_u\cdot(A+B)\cdot\sqrt{\left[A^2\cdot N_u^2+C^2\cdot(A+B)^2\cdot\left(N_u^2+1\right)-2\cdot A\cdot C\cdot N_u^2\cdot(A+B)\right]^2}\cdot(A\cdot C-A+B\cdot C)}{\left[A^2\cdot N_u^2+A^2\cdot C\cdot\left(C-2\cdot N_u^2+C\cdot N_u^2\right)+B^2\cdot C^2\cdot\left(N_u^2+1\right)+2\cdot A\cdot B\cdot C\cdot\left(C-N_u^2+C\cdot N_u^2\right)\right]\cdot\sqrt{C^2\cdot N_u^2\cdot(A+B)^2\cdot(A\cdot C-A+B\cdot C)^2}}$$

0, 0, 0, 4, 0:

$$-\frac{N_u\cdot\sqrt{\left(D^2\cdot {N_u}^2-4\cdot D\cdot {N_u}^2+4\cdot {N_u}^2+4\right)^2}\cdot(D-2)}{\sqrt{{N_u}^2\cdot(D-2)^2}\cdot\left(D^2\cdot {N_u}^2-4\cdot D\cdot {N_u}^2+4\cdot {N_u}^2+4\right)}$$

1, 0, 0, 4, 0:

$$\frac{N_u\cdot(A+1)\cdot\sqrt{\left[(A+1)^2\cdot\left({N_u}^2+1\right)+A^2\cdot D^2\cdot {N_u}^2-2\cdot A\cdot D\cdot {N_u}^2\cdot(A+1)\right]^2}\cdot(A-A\cdot D+1)}{\sqrt{{N_u}^2\cdot(A+1)^2\cdot(A-A\cdot D+1)^2}\cdot\left[{N_u}^2+A^2\cdot\left({N_u}^2-2\cdot D\cdot {N_u}^2+1\right)+2\cdot A\cdot\left({N_u}^2-D\cdot {N_u}^2+1\right)+A^2\cdot D^2\cdot {N_u}^2+1\right]}$$

0, 2, 0, 4, 0:

$$\frac{N_u\cdot(B+1)\cdot\sqrt{\left[(B+1)^2\cdot\left({N_u}^2+1\right)+D^2\cdot {N_u}^2-2\cdot D\cdot {N_u}^2\cdot(B+1)\right]^2}\cdot(B-D+1)}{\sqrt{{N_u}^2\cdot(B+1)^2\cdot(B-D+1)^2}\cdot\left[{N_u}^2+D^2\cdot {N_u}^2+2\cdot B\cdot\left({N_u}^2-D\cdot {N_u}^2+1\right)+B^2\cdot\left({N_u}^2+1\right)-2\cdot D\cdot {N_u}^2+1\right]}$$

1, 2, 0, 4, 0:

$$\frac{N_u\cdot(A+B)\cdot\sqrt{\left[(A+B)^2\cdot\left({N_u}^2+1\right)+A^2\cdot D^2\cdot {N_u}^2-2\cdot A\cdot D\cdot {N_u}^2\cdot(A+B)\right]^2}\cdot(A+B-A\cdot D)}{\sqrt{{N_u}^2\cdot(A+B)^2\cdot(A+B-A\cdot D)^2}\cdot\left[A^2\cdot\left({N_u}^2-2\cdot D\cdot {N_u}^2+1\right)+B^2\cdot\left({N_u}^2+1\right)+2\cdot A\cdot B\cdot\left({N_u}^2-D\cdot {N_u}^2+1\right)+A^2\cdot D^2\cdot {N_u}^2\right]}$$

0, 0, 3, 4, 0:

$$-\frac{C\cdot N_u\cdot\sqrt{\left[D^2\cdot {N_u}^2+4\cdot C^2\cdot\left({N_u}^2+1\right)-4\cdot C\cdot D\cdot {N_u}^2\right]^2}\cdot(D-2\cdot C)}{\sqrt{C^2\cdot {N_u}^2\cdot(D-2\cdot C)^2}\cdot\left[D^2\cdot {N_u}^2+2\cdot C\cdot\left(C+C\cdot {N_u}^2-D\cdot {N_u}^2\right)+C\cdot\left(C+C\cdot {N_u}^2-2\cdot D\cdot {N_u}^2\right)+C^2\cdot\left({N_u}^2+1\right)\right]}$$

1, 0, 3, 4, 0:

$$\frac{C\cdot N_u\cdot(A+1)\cdot\sqrt{\left[C^2\cdot(A+1)^2\cdot\left({N_u}^2+1\right)+A^2\cdot D^2\cdot {N_u}^2-2\cdot A\cdot C\cdot D\cdot {N_u}^2\cdot(A+1)\right]^2}\cdot(C+A\cdot C-A\cdot D)}{\left[C^2\cdot\left({N_u}^2+1\right)+2\cdot A\cdot C\cdot\left(C+C\cdot {N_u}^2-D\cdot {N_u}^2\right)+A^2\cdot D^2\cdot {N_u}^2+A^2\cdot C\cdot\left(C+C\cdot {N_u}^2-2\cdot D\cdot {N_u}^2\right)\right]\cdot\sqrt{C^2\cdot {N_u}^2\cdot(A+1)^2\cdot(C+A\cdot C-A\cdot D)^2}}$$

0, 2, 3, 4, 0:

$$\frac{C\cdot N_u\cdot(B+1)\cdot\sqrt{\left[D^2\cdot {N_u}^2+C^2\cdot(B+1)^2\cdot\left({N_u}^2+1\right)-2\cdot C\cdot D\cdot {N_u}^2\cdot(B+1)\right]^2}\cdot(C-D+B\cdot C)}{\sqrt{C^2\cdot {N_u}^2\cdot(B+1)^2\cdot(C-D+B\cdot C)^2}\cdot\left[D^2\cdot {N_u}^2+C\cdot\left(C+C\cdot {N_u}^2-2\cdot D\cdot {N_u}^2\right)+2\cdot B\cdot C\cdot\left(C+C\cdot {N_u}^2-D\cdot {N_u}^2\right)+B^2\cdot C^2\cdot\left({N_u}^2+1\right)\right]}$$

1, 2, 3, 4, 0:

$$\frac{C\cdot N_u\cdot(A+B)\cdot\sqrt{\left[A^2\cdot D^2\cdot {N_u}^2+C^2\cdot(A+B)^2\cdot\left({N_u}^2+1\right)-2\cdot A\cdot C\cdot D\cdot {N_u}^2\cdot(A+B)\right]^2}\cdot(A\cdot C-A\cdot D+B\cdot C)}{\left[A^2\cdot D^2\cdot {N_u}^2+A^2\cdot C\cdot\left(C+C\cdot {N_u}^2-2\cdot D\cdot {N_u}^2\right)+B^2\cdot C^2\cdot\left({N_u}^2+1\right)+2\cdot A\cdot B\cdot C\cdot\left(C+C\cdot {N_u}^2-D\cdot {N_u}^2\right)\right]\cdot\sqrt{C^2\cdot {N_u}^2\cdot(A+B)^2\cdot(A\cdot C-A\cdot D+B\cdot C)^2}}$$

0, 0, 0, 0, 5:

$$\frac{E \cdot N_u \cdot \sqrt{\left(4 \cdot E^2 + N_u^2\right)^2}}{\sqrt{E^2 \cdot N_u^2} \cdot \left(4 \cdot E^2 + N_u^2\right)}$$

1, 0, 0, 0, 5:

$$\frac{E \cdot N_u \cdot \sqrt{\left[(A+1)^2 \cdot \left(E^2 + N_u^2\right) + A^2 \cdot N_u^2 - 2 \cdot A \cdot N_u^2 \cdot (A+1)\right]^2} \cdot (A+1)}{\sqrt{E^2 \cdot N_u^2 \cdot (A+1)^2} \cdot \left[A^2 \cdot \left(E^2 - N_u^2\right) + E^2 + N_u^2 + A^2 \cdot N_u^2 + 2 \cdot A \cdot E^2\right]}$$

0, 2, 0, 0, 5:

$$\frac{B \cdot E \cdot N_u \cdot (B+1) \cdot \sqrt{\left[(B+1)^2 \cdot \left(E^2 + N_u^2\right) + N_u^2 - 2 \cdot N_u^2 \cdot (B+1)\right]^2}}{\left[E^2 + B^2 \cdot \left(E^2 + N_u^2\right) + 2 \cdot B \cdot E^2\right] \cdot \sqrt{B^2 \cdot E^2 \cdot N_u^2 \cdot (B+1)^2}}$$

1, 2, 0, 0, 5:

$$\frac{B \cdot E \cdot N_u \cdot (A+B) \cdot \sqrt{\left[\left(E^2 + N_u^2\right) \cdot (A+B)^2 + A^2 \cdot N_u^2 - 2 \cdot A \cdot N_u^2 \cdot (A+B)\right]^2}}{\left[A^2 \cdot \left(E^2 - N_u^2\right) + A^2 \cdot N_u^2 + B^2 \cdot \left(E^2 + N_u^2\right) + 2 \cdot A \cdot B \cdot E^2\right] \cdot \sqrt{B^2 \cdot E^2 \cdot N_u^2 \cdot (A+B)^2}}$$

0, 0, 3, 0, 5:

$$\frac{C \cdot E \cdot N_u \cdot (2 \cdot C - 1) \cdot \sqrt{\left[N_u^2 + 4 \cdot C^2 \cdot \left(E^2 + N_u^2\right) - 4 \cdot C \cdot N_u^2\right]^2}}{\left[N_u^2 + C^2 \cdot \left(E^2 + N_u^2\right) + 2 \cdot C \cdot \left(C \cdot E^2 - N_u^2 + C \cdot N_u^2\right) + C \cdot \left(C \cdot E^2 - 2 \cdot N_u^2 + C \cdot N_u^2\right)\right] \cdot \sqrt{C^2 \cdot E^2 \cdot N_u^2 \cdot (2 \cdot C - 1)^2}}$$

1, 0, 3, 0, 5:

$$\frac{C \cdot E \cdot N_u \cdot \sqrt{\left[A^2 \cdot N_u^2 + C^2 \cdot (A+1)^2 \cdot \left(E^2 + N_u^2\right) - 2 \cdot A \cdot C \cdot N_u^2 \cdot (A+1)\right]^2} \cdot (A+1) \cdot (C - A + A \cdot C)}{\left[A^2 \cdot N_u^2 + C^2 \cdot \left(E^2 + N_u^2\right) + A^2 \cdot C \cdot \left(C \cdot E^2 - 2 \cdot N_u^2 + C \cdot N_u^2\right) + 2 \cdot A \cdot C \cdot \left(C \cdot E^2 - N_u^2 + C \cdot N_u^2\right)\right] \cdot \sqrt{C^2 \cdot E^2 \cdot N_u^2 \cdot (A+1)^2 \cdot (C - A + A \cdot C)^2}}$$

0, 2, 3, 0, 5:

$$\frac{C \cdot E \cdot N_u \cdot (B+1) \cdot \sqrt{\left[N_u^2 - 2 \cdot C \cdot N_u^2 \cdot (B+1) + C^2 \cdot (B+1)^2 \cdot \left(E^2 + N_u^2\right)\right]^2} \cdot (C + B \cdot C - 1)}{\left[N_u^2 + C \cdot \left(C \cdot E^2 - 2 \cdot N_u^2 + C \cdot N_u^2\right) + B^2 \cdot C^2 \cdot \left(E^2 + N_u^2\right) + 2 \cdot B \cdot C \cdot \left(C \cdot E^2 - N_u^2 + C \cdot N_u^2\right)\right] \cdot \sqrt{C^2 \cdot E^2 \cdot N_u^2 \cdot (B+1)^2 \cdot (C + B \cdot C - 1)^2}}$$

1, 2, 3, 0, 5:

$$\frac{C \cdot E \cdot N_u \cdot (A+B) \cdot \sqrt{\left[A^2 \cdot N_u^2 + C^2 \cdot \left(E^2 + N_u^2\right) \cdot (A+B)^2 - 2 \cdot A \cdot C \cdot N_u^2 \cdot (A+B)\right]^2} \cdot (A \cdot C - A + B \cdot C)}{\left[A^2 \cdot N_u^2 + B^2 \cdot C^2 \cdot \left(E^2 + N_u^2\right) + A^2 \cdot C \cdot \left(C \cdot E^2 - 2 \cdot N_u^2 + C \cdot N_u^2\right) + 2 \cdot A \cdot B \cdot C \cdot \left(C \cdot E^2 - N_u^2 + C \cdot N_u^2\right)\right] \cdot \sqrt{C^2 \cdot E^2 \cdot N_u^2 \cdot (A+B)^2 \cdot (A \cdot C - A + B \cdot C)^2}}$$

0, 0, 0, 4, 5:

$$-\frac{E\cdot N_u\cdot\sqrt{\left(D^2\cdot N_u{}^2-4\cdot D\cdot N_u{}^2+4\cdot E^2+4\cdot N_u{}^2\right)^2}\cdot(D-2)}{\sqrt{E^2\cdot N_u{}^2\cdot(D-2)^2}\cdot\left(D^2\cdot N_u{}^2-4\cdot D\cdot N_u{}^2+4\cdot E^2+4\cdot N_u{}^2\right)}$$

1, 0, 0, 4, 5:

$$\frac{E\cdot N_u\cdot\sqrt{\left[(A+1)^2\cdot\left(E^2+N_u{}^2\right)+A^2\cdot D^2\cdot N_u{}^2-2\cdot A\cdot D\cdot N_u{}^2\cdot(A+1)\right]^2}\cdot(A+1)\cdot(A-A\cdot D+1)}{\sqrt{E^2\cdot N_u{}^2\cdot(A+1)^2\cdot(A-A\cdot D+1)^2}\cdot\left[A^2\cdot\left(E^2+N_u{}^2-2\cdot D\cdot N_u{}^2\right)+E^2+N_u{}^2+2\cdot A\cdot\left(E^2+N_u{}^2-D\cdot N_u{}^2\right)+A^2\cdot D^2\cdot N_u{}^2\right]}$$

0, 2, 0, 4, 5:

$$\frac{E\cdot N_u\cdot\sqrt{\left[(B+1)^2\cdot\left(E^2+N_u{}^2\right)+D^2\cdot N_u{}^2-2\cdot D\cdot N_u{}^2\cdot(B+1)\right]^2}\cdot(B+1)\cdot(B-D+1)}{\sqrt{E^2\cdot N_u{}^2\cdot(B+1)^2\cdot(B-D+1)^2}\cdot\left[E^2+N_u{}^2+D^2\cdot N_u{}^2+2\cdot B\cdot\left(E^2+N_u{}^2-D\cdot N_u{}^2\right)+B^2\cdot\left(E^2+N_u{}^2\right)-2\cdot D\cdot N_u{}^2\right]}$$

1, 2, 0, 4, 5:

$$\frac{E\cdot N_u\cdot(A+B)\cdot\sqrt{\left[\left(E^2+N_u{}^2\right)\cdot(A+B)^2+A^2\cdot D^2\cdot N_u{}^2-2\cdot A\cdot D\cdot N_u{}^2\cdot(A+B)\right]^2}\cdot(A+B-A\cdot D)}{\sqrt{E^2\cdot N_u{}^2\cdot(A+B)^2\cdot(A+B-A\cdot D)^2}\cdot\left[A^2\cdot\left(E^2+N_u{}^2-2\cdot D\cdot N_u{}^2\right)+B^2\cdot\left(E^2+N_u{}^2\right)+A^2\cdot D^2\cdot N_u{}^2+2\cdot A\cdot B\cdot\left(E^2+N_u{}^2-D\cdot N_u{}^2\right)\right]}$$

0, 0, 3, 4, 5:

$$-\frac{C\cdot E\cdot N_u\cdot\sqrt{\left[D^2\cdot N_u{}^2+4\cdot C^2\cdot\left(E^2+N_u{}^2\right)-4\cdot C\cdot D\cdot N_u{}^2\right]^2}\cdot(D-2\cdot C)}{\sqrt{C^2\cdot E^2\cdot N_u{}^2\cdot(D-2\cdot C)^2}\cdot\left[D^2\cdot N_u{}^2+C^2\cdot\left(E^2+N_u{}^2\right)+2\cdot C\cdot\left(C\cdot E^2+C\cdot N_u{}^2-D\cdot N_u{}^2\right)+C\cdot\left(C\cdot E^2+C\cdot N_u{}^2-2\cdot D\cdot N_u{}^2\right)\right]}$$

1, 0, 3, 4, 5:

$$\frac{C\cdot E\cdot N_u\cdot\sqrt{\left[A^2\cdot D^2\cdot N_u{}^2+C^2\cdot(A+1)^2\cdot\left(E^2+N_u{}^2\right)-2\cdot A\cdot C\cdot D\cdot N_u{}^2\cdot(A+1)\right]^2}\cdot(A+1)\cdot(C+A\cdot C-A\cdot D)}{\left[C^2\cdot\left(E^2+N_u{}^2\right)+A^2\cdot D^2\cdot N_u{}^2+2\cdot A\cdot C\cdot\left(C\cdot E^2+C\cdot N_u{}^2-D\cdot N_u{}^2\right)+A^2\cdot C\cdot\left(C\cdot E^2+C\cdot N_u{}^2-2\cdot D\cdot N_u{}^2\right)\right]\cdot\sqrt{C^2\cdot E^2\cdot N_u{}^2\cdot(A+1)^2\cdot(C+A\cdot C-A\cdot D)^2}}$$

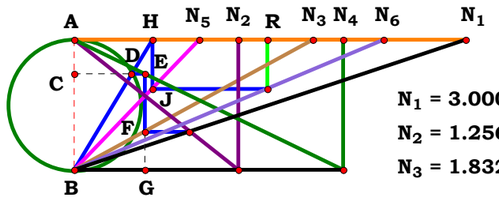
0, 2, 3, 4, 5:

$$\frac{C\cdot E\cdot N_u\cdot\sqrt{\left[D^2\cdot N_u{}^2+C^2\cdot(B+1)^2\cdot\left(E^2+N_u{}^2\right)-2\cdot C\cdot D\cdot N_u{}^2\cdot(B+1)\right]^2}\cdot(B+1)\cdot(C-D+B\cdot C)}{\left[D^2\cdot N_u{}^2+C\cdot\left(C\cdot E^2+C\cdot N_u{}^2-2\cdot D\cdot N_u{}^2\right)+2\cdot B\cdot C\cdot\left(C\cdot E^2+C\cdot N_u{}^2-D\cdot N_u{}^2\right)+B^2\cdot C^2\cdot\left(E^2+N_u{}^2\right)\right]\cdot\sqrt{C^2\cdot E^2\cdot N_u{}^2\cdot(B+1)^2\cdot(C-D+B\cdot C)^2}}$$

1, 2, 3, 4, 5:

$$\frac{C\cdot E\cdot N_u\cdot(A+B)\cdot\sqrt{\left[C^2\cdot\left(E^2+N_u{}^2\right)\cdot(A+B)^2+A^2\cdot D^2\cdot N_u{}^2-2\cdot A\cdot C\cdot D\cdot N_u{}^2\cdot(A+B)\right]^2}\cdot(A\cdot C-A\cdot D+B\cdot C)}{\left[A^2\cdot C\cdot\left(C\cdot E^2+C\cdot N_u{}^2-2\cdot D\cdot N_u{}^2\right)+A^2\cdot D^2\cdot N_u{}^2+2\cdot A\cdot B\cdot C\cdot\left(C\cdot E^2+C\cdot N_u{}^2-D\cdot N_u{}^2\right)+B^2\cdot C^2\cdot\left(E^2+N_u{}^2\right)\right]\cdot\sqrt{C^2\cdot E^2\cdot N_u{}^2\cdot(A+B)^2\cdot(A\cdot C-A\cdot D+B\cdot C)^2}}$$

2SMT6R5



$N_1 = 3.00000$ $N_4 = 2.06284$

$N_2 = 1.25656$ $N_5 = 0.95481$

$N_3 = 1.83275$ $N_6 = 2.37274$

$R = 1.48172$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 1.25656$ $N_3 := 1.83275$

$N_4 := 2.06284$ $N_5 := .95481$ $N_6 := 2.37274$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{A \cdot D \cdot E}{F \cdot \sqrt{A \cdot D} \cdot \sqrt{A \cdot C - A \cdot D + B \cdot C}} = 1.481726$$

$$Num := \frac{A \cdot D \cdot E}{\sqrt{(A \cdot D \cdot E)^2}}$$

$$Den := \frac{F \cdot \sqrt{A \cdot D} \cdot \sqrt{A \cdot C - A \cdot D + B \cdot C}}{\sqrt{\left(F \cdot \sqrt{A \cdot D} \cdot \sqrt{A \cdot C - A \cdot D + B \cdot C}\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{E \cdot \sqrt{A \cdot D \cdot (A \cdot C - A \cdot D + B \cdot C)} \cdot \sqrt{A \cdot D \cdot F^2 \cdot (A \cdot C - A \cdot D + B \cdot C)}}{F \cdot \sqrt{A^2 \cdot D^2 \cdot E^2} \cdot (A \cdot C - A \cdot D + B \cdot C)} = 0$$

For 6 variables there are 64 subsets.

0, 0, 0, 0, 0, 0:	1	0, 0, 0, 4, 0, 0:	$\frac{D}{\sqrt{D^2}}$	0, 0, 0, 0, 5, 0:	$\frac{E}{\sqrt{E^2}}$	0, 0, 0, 4, 5, 0:	$\frac{D \cdot E}{\sqrt{D^2 \cdot E^2}}$
1, 0, 0, 0, 0, 0:	$\frac{A}{\sqrt{A^2}}$	1, 0, 0, 4, 0, 0:	$\frac{A \cdot D}{\sqrt{A^2 \cdot D^2}}$	1, 0, 0, 0, 5, 0:	$\frac{A \cdot E}{\sqrt{A^2 \cdot E^2}}$	1, 0, 0, 4, 5, 0:	$\frac{A \cdot D \cdot E}{\sqrt{A^2 \cdot D^2 \cdot E^2}}$
0, 2, 0, 0, 0, 0:	1	0, 2, 0, 4, 0, 0:	$\frac{D}{\sqrt{D^2}}$	0, 2, 0, 0, 5, 0:	$\frac{E}{\sqrt{E^2}}$	0, 2, 0, 4, 5, 0:	$\frac{D \cdot E}{\sqrt{D^2 \cdot E^2}}$
1, 2, 0, 0, 0, 0:	$\frac{A}{\sqrt{A^2}}$	1, 2, 0, 4, 0, 0:	$\frac{A \cdot D}{\sqrt{A^2 \cdot D^2}}$	1, 2, 0, 0, 5, 0:	$\frac{A \cdot E}{\sqrt{A^2 \cdot E^2}}$	1, 2, 0, 4, 5, 0:	$\frac{A \cdot D \cdot E}{\sqrt{A^2 \cdot D^2 \cdot E^2}}$
0, 0, 3, 0, 0, 0:	1	0, 0, 3, 4, 0, 0:	$\frac{D}{\sqrt{D^2}}$	0, 0, 3, 0, 5, 0:	$\frac{E}{\sqrt{E^2}}$	0, 0, 3, 4, 5, 0:	$\frac{D \cdot E}{\sqrt{D^2 \cdot E^2}}$
1, 0, 3, 0, 0, 0:	$\frac{A}{\sqrt{A^2}}$	1, 0, 3, 4, 0, 0:	$\frac{A \cdot D}{\sqrt{A^2 \cdot D^2}}$	1, 0, 3, 0, 5, 0:	$\frac{A \cdot E}{\sqrt{A^2 \cdot E^2}}$	1, 0, 3, 4, 5, 0:	$\frac{A \cdot D \cdot E}{\sqrt{A^2 \cdot D^2 \cdot E^2}}$
0, 2, 3, 0, 0, 0:	1	0, 2, 3, 4, 0, 0:	$\frac{D}{\sqrt{D^2}}$	0, 2, 3, 0, 5, 0:	$\frac{E}{\sqrt{E^2}}$	0, 2, 3, 4, 5, 0:	$\frac{D \cdot E}{\sqrt{D^2 \cdot E^2}}$
1, 2, 3, 0, 0, 0:	$\frac{A}{\sqrt{A^2}}$	1, 2, 3, 4, 0, 0:	$\frac{A \cdot D}{\sqrt{A^2 \cdot D^2}}$	1, 2, 3, 0, 5, 0:	$\frac{A \cdot E}{\sqrt{A^2 \cdot E^2}}$	1, 2, 3, 4, 5, 0:	$\frac{A \cdot D \cdot E}{\sqrt{A^2 \cdot D^2 \cdot E^2}}$

0, 0, 0, 0, 0, 6: $\frac{\sqrt{\mathbf{F}^2}}{\mathbf{F}}$

1, 0, 0, 0, 0, 6: $\frac{\sqrt{\mathbf{A}}\cdot\sqrt{\mathbf{A}\cdot\mathbf{F}^2}}{\mathbf{F}\cdot\sqrt{\mathbf{A}^2}}$

0, 2, 0, 0, 0, 6: $\frac{\sqrt{\mathbf{B}\cdot\mathbf{F}^2}}{\sqrt{\mathbf{B}}\cdot\mathbf{F}}$

1, 2, 0, 0, 0, 6: $\frac{\sqrt{\mathbf{A}\cdot\mathbf{B}}\cdot\sqrt{\mathbf{A}\cdot\mathbf{B}\cdot\mathbf{F}^2}}{\mathbf{B}\cdot\mathbf{F}\cdot\sqrt{\mathbf{A}^2}}$

0, 0, 3, 0, 0, 6: $\frac{\sqrt{\mathbf{F}^2\cdot(2\cdot\mathbf{C}-1)}}{\mathbf{F}\cdot\sqrt{2\cdot\mathbf{C}-1}}$

1, 0, 3, 0, 0, 6: $\frac{\sqrt{\mathbf{A}\cdot(\mathbf{C}-\mathbf{A}+\mathbf{A}\cdot\mathbf{C})}\cdot\sqrt{\mathbf{A}\cdot\mathbf{F}^2\cdot(\mathbf{C}-\mathbf{A}+\mathbf{A}\cdot\mathbf{C})}}{\mathbf{F}\cdot\sqrt{\mathbf{A}^2}\cdot(\mathbf{C}-\mathbf{A}+\mathbf{A}\cdot\mathbf{C})}$

0, 2, 3, 0, 0, 6: $\frac{\sqrt{\mathbf{F}^2\cdot(\mathbf{C}+\mathbf{B}\cdot\mathbf{C}-1)}}{\mathbf{F}\cdot\sqrt{\mathbf{C}+\mathbf{B}\cdot\mathbf{C}-1}}$

1, 2, 3, 0, 0, 6: $\frac{\sqrt{\mathbf{A}\cdot(\mathbf{A}\cdot\mathbf{C}-\mathbf{A}+\mathbf{B}\cdot\mathbf{C})}\cdot\sqrt{\mathbf{A}\cdot\mathbf{F}^2\cdot(\mathbf{A}\cdot\mathbf{C}-\mathbf{A}+\mathbf{B}\cdot\mathbf{C})}}{\mathbf{F}\cdot\sqrt{\mathbf{A}^2}\cdot(\mathbf{A}\cdot\mathbf{C}-\mathbf{A}+\mathbf{B}\cdot\mathbf{C})}$

0, 0, 0, 4, 0, 6: $-\frac{\sqrt{-\mathbf{D}\cdot(\mathbf{D}-2)}\cdot\sqrt{-\mathbf{D}\cdot\mathbf{F}^2\cdot(\mathbf{D}-2)}}{\mathbf{F}\cdot(\mathbf{D}-2)\cdot\sqrt{\mathbf{D}^2}}$

1, 0, 0, 4, 0, 6: $\frac{\sqrt{\mathbf{A}\cdot\mathbf{D}\cdot(\mathbf{A}-\mathbf{A}\cdot\mathbf{D}+1)}\cdot\sqrt{\mathbf{A}\cdot\mathbf{D}\cdot\mathbf{F}^2\cdot(\mathbf{A}-\mathbf{A}\cdot\mathbf{D}+1)}}{\mathbf{F}\cdot\sqrt{\mathbf{A}^2\cdot\mathbf{D}^2}\cdot(\mathbf{A}-\mathbf{A}\cdot\mathbf{D}+1)}$

0, 2, 0, 4, 0, 6: $\frac{\sqrt{\mathbf{D}\cdot(\mathbf{B}-\mathbf{D}+1)}\cdot\sqrt{\mathbf{D}\cdot\mathbf{F}^2\cdot(\mathbf{B}-\mathbf{D}+1)}}{\mathbf{F}\cdot\sqrt{\mathbf{D}^2}\cdot(\mathbf{B}-\mathbf{D}+1)}$

1, 2, 0, 4, 0, 6: $\frac{\sqrt{\mathbf{A}\cdot\mathbf{D}\cdot(\mathbf{A}+\mathbf{B}-\mathbf{A}\cdot\mathbf{D})}\cdot\sqrt{\mathbf{A}\cdot\mathbf{D}\cdot\mathbf{F}^2\cdot(\mathbf{A}+\mathbf{B}-\mathbf{A}\cdot\mathbf{D})}}{\mathbf{F}\cdot\sqrt{\mathbf{A}^2\cdot\mathbf{D}^2}\cdot(\mathbf{A}+\mathbf{B}-\mathbf{A}\cdot\mathbf{D})}$

0, 0, 3, 4, 0, 6: $-\frac{\sqrt{-\mathbf{D}\cdot(\mathbf{D}-2\cdot\mathbf{C})}\cdot\sqrt{-\mathbf{D}\cdot\mathbf{F}^2\cdot(\mathbf{D}-2\cdot\mathbf{C})}}{\mathbf{F}\cdot\sqrt{\mathbf{D}^2}\cdot(\mathbf{D}-2\cdot\mathbf{C})}$

1, 0, 3, 4, 0, 6: $\frac{\sqrt{\mathbf{A}\cdot\mathbf{D}\cdot(\mathbf{C}+\mathbf{A}\cdot\mathbf{C}-\mathbf{A}\cdot\mathbf{D})}\cdot\sqrt{\mathbf{A}\cdot\mathbf{D}\cdot\mathbf{F}^2\cdot(\mathbf{C}+\mathbf{A}\cdot\mathbf{C}-\mathbf{A}\cdot\mathbf{D})}}{\mathbf{F}\cdot\sqrt{\mathbf{A}^2\cdot\mathbf{D}^2}\cdot(\mathbf{C}+\mathbf{A}\cdot\mathbf{C}-\mathbf{A}\cdot\mathbf{D})}$

0, 2, 3, 4, 0, 6: $\frac{\sqrt{\mathbf{D}\cdot(\mathbf{C}-\mathbf{D}+\mathbf{B}\cdot\mathbf{C})}\cdot\sqrt{\mathbf{D}\cdot\mathbf{F}^2\cdot(\mathbf{C}-\mathbf{D}+\mathbf{B}\cdot\mathbf{C})}}{\mathbf{F}\cdot\sqrt{\mathbf{D}^2}\cdot(\mathbf{C}-\mathbf{D}+\mathbf{B}\cdot\mathbf{C})}$

1, 2, 3, 4, 0, 6: $\frac{\sqrt{\mathbf{A}\cdot\mathbf{D}\cdot(\mathbf{A}\cdot\mathbf{C}-\mathbf{A}\cdot\mathbf{D}+\mathbf{B}\cdot\mathbf{C})}\cdot\sqrt{\mathbf{A}\cdot\mathbf{D}\cdot\mathbf{F}^2\cdot(\mathbf{A}\cdot\mathbf{C}-\mathbf{A}\cdot\mathbf{D}+\mathbf{B}\cdot\mathbf{C})}}{\mathbf{F}\cdot\sqrt{\mathbf{A}^2\cdot\mathbf{D}^2}\cdot(\mathbf{A}\cdot\mathbf{C}-\mathbf{A}\cdot\mathbf{D}+\mathbf{B}\cdot\mathbf{C})}$

0, 0, 0, 0, 5, 6: $$\frac{E\cdot\sqrt{F^2}}{F\cdot\sqrt{E^2}}$$

1, 0, 0, 0, 5, 6: $$\frac{\sqrt{A}\cdot E\cdot\sqrt{A\cdot F^2}}{F\cdot\sqrt{A^2\cdot E^2}}$$

0, 2, 0, 0, 5, 6: $$\frac{E\cdot\sqrt{B\cdot F^2}}{\sqrt{B}\cdot F\cdot\sqrt{E^2}}$$

1, 2, 0, 0, 5, 6: $$\frac{E\cdot\sqrt{A\cdot B}\cdot\sqrt{A\cdot B\cdot F^2}}{B\cdot F\cdot\sqrt{A^2\cdot E^2}}$$

0, 0, 3, 0, 5, 6: $$\frac{E\cdot\sqrt{F^2\cdot(2\cdot C-1)}}{F\cdot\sqrt{E^2}\cdot\sqrt{2\cdot C-1}}$$

1, 0, 3, 0, 5, 6: $$\frac{E\cdot\sqrt{A\cdot(C-A+A\cdot C)}\cdot\sqrt{A\cdot F^2\cdot(C-A+A\cdot C)}}{F\cdot\sqrt{A^2\cdot E^2}\cdot(C-A+A\cdot C)}$$

0, 2, 3, 0, 5, 6: $$\frac{E\cdot\sqrt{F^2\cdot(C+B\cdot C-1)}}{F\cdot\sqrt{E^2}\cdot\sqrt{C+B\cdot C-1}}$$

1, 2, 3, 0, 5, 6: $$\frac{E\cdot\sqrt{A\cdot(A\cdot C-A+B\cdot C)}\cdot\sqrt{A\cdot F^2\cdot(A\cdot C-A+B\cdot C)}}{F\cdot\sqrt{A^2\cdot E^2}\cdot(A\cdot C-A+B\cdot C)}$$

0, 0, 0, 4, 5, 6: $$-\frac{E\cdot\sqrt{-D\cdot(D-2)}\cdot\sqrt{-D\cdot F^2\cdot(D-2)}}{F\cdot(D-2)\cdot\sqrt{D^2\cdot E^2}}$$

1, 0, 0, 4, 5, 6: $$\frac{E\cdot\sqrt{A\cdot D\cdot(A-A\cdot D+1)}\cdot\sqrt{A\cdot D\cdot F^2\cdot(A-A\cdot D+1)}}{F\cdot\sqrt{A^2\cdot D^2\cdot E^2}\cdot(A-A\cdot D+1)}$$

0, 2, 0, 4, 5, 6: $$\frac{E\cdot\sqrt{D\cdot(B-D+1)}\cdot\sqrt{D\cdot F^2\cdot(B-D+1)}}{F\cdot\sqrt{D^2\cdot E^2}\cdot(B-D+1)}$$

1, 2, 0, 4, 5, 6: $$\frac{E\cdot\sqrt{A\cdot D\cdot(A+B-A\cdot D)}\cdot\sqrt{A\cdot D\cdot F^2\cdot(A+B-A\cdot D)}}{F\cdot\sqrt{A^2\cdot D^2\cdot E^2}\cdot(A+B-A\cdot D)}$$

0, 0, 3, 4, 5, 6: $$-\frac{E\cdot\sqrt{-D\cdot(D-2\cdot C)}\cdot\sqrt{-D\cdot F^2\cdot(D-2\cdot C)}}{F\cdot\sqrt{D^2\cdot E^2}\cdot(D-2\cdot C)}$$

1, 0, 3, 4, 5, 6: $$\frac{E\cdot\sqrt{A\cdot D\cdot(C+A\cdot C-A\cdot D)}\cdot\sqrt{A\cdot D\cdot F^2\cdot(C+A\cdot C-A\cdot D)}}{F\cdot(C+A\cdot C-A\cdot D)\cdot\sqrt{A^2\cdot D^2\cdot E^2}}$$

0, 2, 3, 4, 5, 6: $$\frac{E\cdot\sqrt{D\cdot(C-D+B\cdot C)}\cdot\sqrt{D\cdot F^2\cdot(C-D+B\cdot C)}}{F\cdot\sqrt{D^2\cdot E^2}\cdot(C-D+B\cdot C)}$$

1, 2, 3, 4, 5, 6: $$\frac{E\cdot\sqrt{A\cdot D\cdot(A\cdot C-A\cdot D+B\cdot C)}\cdot\sqrt{A\cdot D\cdot F^2\cdot(A\cdot C-A\cdot D+B\cdot C)}}{F\cdot\sqrt{A^2\cdot D^2\cdot E^2}\cdot(A\cdot C-A\cdot D+B\cdot C)}$$

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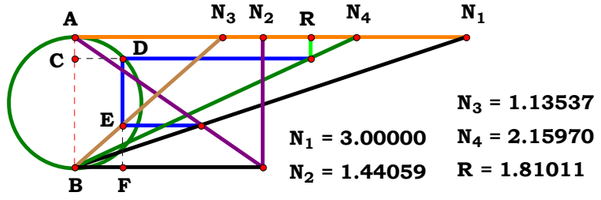

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 1.44059$ $N_3 := 1.13537$

$N_4 := 2.15970$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left[\sqrt{\left[C \cdot (A+B) - 2 \cdot A \cdot N_u\right] \cdot \left[C \cdot (A+B) + 2 \cdot A \cdot N_u\right]} + C \cdot (A+B)\right]}{2 \cdot D \cdot (A+B) \cdot C} = 1.810113$$

$$Num := \frac{N_u \cdot \left[\sqrt{\left[C \cdot (A+B) - 2 \cdot A \cdot N_u\right] \cdot \left[C \cdot (A+B) + 2 \cdot A \cdot N_u\right]} + C \cdot (A+B)\right]}{\sqrt{\left[N_u \cdot \left[\sqrt{\left[C \cdot (A+B) - 2 \cdot A \cdot N_u\right] \cdot \left[C \cdot (A+B) + 2 \cdot A \cdot N_u\right]} + C \cdot (A+B)\right]\right]^2}}$$

$$Den := \frac{2 \cdot D \cdot (A+B) \cdot C}{\sqrt{[2 \cdot D \cdot (A+B) \cdot C]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[A \cdot C + B \cdot C + \sqrt{\left[C \cdot (A+B) - 2 \cdot A \cdot N_u\right] \cdot \left[C \cdot (A+B) + 2 \cdot A \cdot N_u\right]}\right] \cdot \sqrt{C^2 \cdot D^2 \cdot (A+B)^2}}{C \cdot D \cdot \sqrt{N_u^2 \cdot \left[C \cdot (A+B) + \sqrt{\left[C \cdot (A+B) - 2 \cdot A \cdot N_u\right] \cdot \left[C \cdot (A+B) + 2 \cdot A \cdot N_u\right]}\right]^2} \cdot (A+B)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $$\frac{N_u\cdot\left[\sqrt{-\left(2\cdot N_u-2\right)\cdot\left(2\cdot N_u+2\right)}+2\right]}{\sqrt{{N_u}^2\cdot\left[\sqrt{-\left(2\cdot N_u-2\right)\cdot\left(2\cdot N_u+2\right)}+2\right]^2}}$$

1, 0, 0, 0: $$\frac{N_u\cdot\sqrt{(A+1)^2}\cdot\left[A+\sqrt{\left(A-2\cdot A\cdot N_u+1\right)\cdot\left(A+2\cdot A\cdot N_u+1\right)}+1\right]}{\sqrt{{N_u}^2\cdot\left[A+\sqrt{\left(A-2\cdot A\cdot N_u+1\right)\cdot\left(A+2\cdot A\cdot N_u+1\right)}+1\right]^2}\cdot(A+1)}$$

0, 2, 0, 0: $$\frac{N_u\cdot\sqrt{(B+1)^2}\cdot\left[B+\sqrt{\left(B-2\cdot N_u+1\right)\cdot\left(B+2\cdot N_u+1\right)}+1\right]}{(B+1)\cdot\sqrt{{N_u}^2\cdot\left[B+\sqrt{\left(B-2\cdot N_u+1\right)\cdot\left(B+2\cdot N_u+1\right)}+1\right]^2}}$$

1, 2, 0, 0: $$\frac{N_u\cdot\sqrt{(A+B)^2}\cdot\left[A+B+\sqrt{\left(A+B-2\cdot A\cdot N_u\right)\cdot\left(A+B+2\cdot A\cdot N_u\right)}\right]}{(A+B)\cdot\sqrt{{N_u}^2\cdot\left[A+B+\sqrt{\left(A+B-2\cdot A\cdot N_u\right)\cdot\left(A+B+2\cdot A\cdot N_u\right)}\right]^2}}$$

0, 0, 3, 0: $$\frac{N_u\cdot\sqrt{C^2}\cdot\left[2\cdot C+\sqrt{\left(2\cdot C-2\cdot N_u\right)\cdot\left(2\cdot C+2\cdot N_u\right)}\right]}{C\cdot\sqrt{{N_u}^2\cdot\left[2\cdot C+\sqrt{\left(2\cdot C-2\cdot N_u\right)\cdot\left(2\cdot C+2\cdot N_u\right)}\right]^2}}$$

1, 0, 3, 0: $$\frac{N_u\cdot\sqrt{C^2\cdot(A+1)^2}\cdot\left[C+\sqrt{\left[C\cdot(A+1)-2\cdot A\cdot N_u\right]\cdot\left[2\cdot A\cdot N_u+C\cdot(A+1)\right]}+A\cdot C\right]}{C\cdot(A+1)\cdot\sqrt{{N_u}^2\cdot\left[\sqrt{\left[C\cdot(A+1)-2\cdot A\cdot N_u\right]\cdot\left[2\cdot A\cdot N_u+C\cdot(A+1)\right]}+C\cdot(A+1)\right]^2}}$$

0, 2, 3, 0: $$\frac{N_u\cdot\sqrt{C^2\cdot(B+1)^2}\cdot\left[C+B\cdot C+\sqrt{-\left[2\cdot N_u+C\cdot(B+1)\right]\cdot\left[2\cdot N_u-C\cdot(B+1)\right]}\right]}{C\cdot\sqrt{{N_u}^2\cdot\left[\sqrt{-\left[2\cdot N_u+C\cdot(B+1)\right]\cdot\left[2\cdot N_u-C\cdot(B+1)\right]}+C\cdot(B+1)\right]^2}\cdot(B+1)}$$

1, 2, 3, 0: $$\frac{N_u\cdot\sqrt{C^2\cdot(A+B)^2}\cdot\left[A\cdot C+B\cdot C+\sqrt{\left[C\cdot(A+B)-2\cdot A\cdot N_u\right]\cdot\left[C\cdot(A+B)+2\cdot A\cdot N_u\right]}\right]}{C\cdot\sqrt{{N_u}^2\cdot\left[C\cdot(A+B)+\sqrt{\left[C\cdot(A+B)-2\cdot A\cdot N_u\right]\cdot\left[C\cdot(A+B)+2\cdot A\cdot N_u\right]}\right]^2}\cdot(A+B)}$$

0, 0, 0, 4: $$\frac{N_u\cdot\sqrt{D^2}\cdot\left[\sqrt{-\left(2\cdot N_u-2\right)\cdot\left(2\cdot N_u+2\right)}+2\right]}{D\cdot\sqrt{{N_u}^2\cdot\left[\sqrt{-\left(2\cdot N_u-2\right)\cdot\left(2\cdot N_u+2\right)}+2\right]^2}}$$

1, 0, 0, 4: $$\frac{N_u\cdot\sqrt{D^2\cdot(A+1)^2}\cdot\left[A+\sqrt{\left(A-2\cdot A\cdot N_u+1\right)\cdot\left(A+2\cdot A\cdot N_u+1\right)}+1\right]}{D\cdot\sqrt{{N_u}^2\cdot\left[A+\sqrt{\left(A-2\cdot A\cdot N_u+1\right)\cdot\left(A+2\cdot A\cdot N_u+1\right)}+1\right]^2}\cdot(A+1)}$$

0, 2, 0, 4: $$\frac{N_u\cdot\sqrt{D^2\cdot(B+1)^2}\cdot\left[B+\sqrt{\left(B-2\cdot N_u+1\right)\cdot\left(B+2\cdot N_u+1\right)}+1\right]}{D\cdot(B+1)\cdot\sqrt{{N_u}^2\cdot\left[B+\sqrt{\left(B-2\cdot N_u+1\right)\cdot\left(B+2\cdot N_u+1\right)}+1\right]^2}}$$

1, 2, 0, 4: $$\frac{N_u\cdot\sqrt{D^2\cdot(A+B)^2}\cdot\left[A+B+\sqrt{\left(A+B-2\cdot A\cdot N_u\right)\cdot\left(A+B+2\cdot A\cdot N_u\right)}\right]}{D\cdot(A+B)\cdot\sqrt{{N_u}^2\cdot\left[A+B+\sqrt{\left(A+B-2\cdot A\cdot N_u\right)\cdot\left(A+B+2\cdot A\cdot N_u\right)}\right]^2}}$$

0, 0, 3, 4: $$\frac{N_u\cdot\left[2\cdot C+\sqrt{\left(2\cdot C-2\cdot N_u\right)\cdot\left(2\cdot C+2\cdot N_u\right)}\right]\cdot\sqrt{C^2\cdot D^2}}{C\cdot D\cdot\sqrt{{N_u}^2\cdot\left[2\cdot C+\sqrt{\left(2\cdot C-2\cdot N_u\right)\cdot\left(2\cdot C+2\cdot N_u\right)}\right]^2}}$$

1, 0, 3, 4: $$\frac{N_u\cdot\sqrt{C^2\cdot D^2\cdot(A+1)^2}\cdot\left[C+\sqrt{\left[C\cdot(A+1)-2\cdot A\cdot N_u\right]\cdot\left[2\cdot A\cdot N_u+C\cdot(A+1)\right]}+A\cdot C\right]}{C\cdot D\cdot(A+1)\cdot\sqrt{{N_u}^2\cdot\left[\sqrt{\left[C\cdot(A+1)-2\cdot A\cdot N_u\right]\cdot\left[2\cdot A\cdot N_u+C\cdot(A+1)\right]}+C\cdot(A+1)\right]^2}}$$

0, 2, 3, 4: $$\frac{N_u\cdot\left[C+B\cdot C+\sqrt{-\left[2\cdot N_u+C\cdot(B+1)\right]\cdot\left[2\cdot N_u-C\cdot(B+1)\right]}\right]\cdot\sqrt{C^2\cdot D^2\cdot(B+1)^2}}{C\cdot D\cdot\sqrt{{N_u}^2\cdot\left[\sqrt{-\left[2\cdot N_u+C\cdot(B+1)\right]\cdot\left[2\cdot N_u-C\cdot(B+1)\right]}+C\cdot(B+1)\right]^2}\cdot(B+1)}$$

1, 2, 3, 4: $$\frac{N_u\cdot\left[A\cdot C+B\cdot C+\sqrt{\left[C\cdot(A+B)-2\cdot A\cdot N_u\right]\cdot\left[C\cdot(A+B)+2\cdot A\cdot N_u\right]}\right]\cdot\sqrt{C^2\cdot D^2\cdot(A+B)^2}}{C\cdot D\cdot\sqrt{{N_u}^2\cdot\left[C\cdot(A+B)+\sqrt{\left[C\cdot(A+B)-2\cdot A\cdot N_u\right]\cdot\left[C\cdot(A+B)+2\cdot A\cdot N_u\right]}\right]^2}\cdot(A+B)}$$

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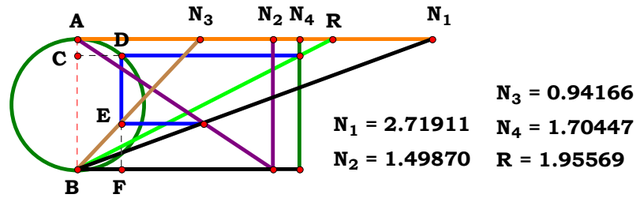

$N_3 = 0.94166$
$N_4 = 1.70447$
$N_1 = 2.71911$
$R = 1.95569$
$N_2 = 1.49870$

Unit. $AB := 1$ **Given.** $N_1 := 2.71911$ $N_2 := 1.49870$ $N_3 := .94166$

$N_4 := 1.70447$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2 \cdot N_u \cdot (A+B) \cdot C}{D \cdot \left[C \cdot (A+B) + \sqrt{\left[\left(A \cdot C + B \cdot C - 2 \cdot A \cdot N_u \right) \cdot \left(A \cdot C + B \cdot C + 2 \cdot A \cdot N_u \right) \right]} \right]} = 1.95569$$

$$Num := \frac{2 \cdot N_u \cdot (A+B) \cdot C}{\sqrt{\left[2 \cdot N_u \cdot (A+B) \cdot C \right]^2}}$$

$$Den := \frac{D \cdot \left[C \cdot (A+B) + \sqrt{\left[\left(A \cdot C + B \cdot C - 2 \cdot A \cdot N_u \right) \cdot \left(A \cdot C + B \cdot C + 2 \cdot A \cdot N_u \right) \right]} \right]}{\sqrt{\left[D \cdot \left[C \cdot (A+B) + \sqrt{\left[\left(A \cdot C + B \cdot C - 2 \cdot A \cdot N_u \right) \cdot \left(A \cdot C + B \cdot C + 2 \cdot A \cdot N_u \right) \right]} \right] \right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot N_u \cdot (A+B) \cdot \sqrt{D^2 \cdot \left[\sqrt{\left(A \cdot C + B \cdot C - 2 \cdot A \cdot N_u \right) \cdot \left(A \cdot C + B \cdot C + 2 \cdot A \cdot N_u \right)} + C \cdot (A+B) \right]^2}}{D \cdot \left[\sqrt{\left(A \cdot C + B \cdot C - 2 \cdot A \cdot N_u \right) \cdot \left(A \cdot C + B \cdot C + 2 \cdot A \cdot N_u \right)} + A \cdot C + B \cdot C \right] \cdot \sqrt{C^2 \cdot {N_u}^2 \cdot (A+B)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:

$$\frac{N_u \cdot \sqrt{\left[\sqrt{-(2 \cdot N_u - 2) \cdot (2 \cdot N_u + 2)} + 2\right]^2}}{\left[\sqrt{-(2 \cdot N_u - 2) \cdot (2 \cdot N_u + 2)} + 2\right] \cdot \sqrt{N_u{}^2}}$$

1, 0, 0, 0:

$$\frac{N_u \cdot (A+1) \cdot \sqrt{\left[A + \sqrt{(A - 2 \cdot A \cdot N_u + 1) \cdot (A + 2 \cdot A \cdot N_u + 1)} + 1\right]^2}}{\sqrt{N_u{}^2 \cdot (A+1)^2} \cdot \left[A + \sqrt{(A - 2 \cdot A \cdot N_u + 1) \cdot (A + 2 \cdot A \cdot N_u + 1)} + 1\right]}$$

0, 2, 0, 0:

$$\frac{N_u \cdot (B+1) \cdot \sqrt{\left[B + \sqrt{(B - 2 \cdot N_u + 1) \cdot (B + 2 \cdot N_u + 1)} + 1\right]^2}}{\sqrt{N_u{}^2 \cdot (B+1)^2} \cdot \left[B + \sqrt{(B - 2 \cdot N_u + 1) \cdot (B + 2 \cdot N_u + 1)} + 1\right]}$$

1, 2, 0, 0:

$$\frac{N_u \cdot (A+B) \cdot \sqrt{\left[A + B + \sqrt{(A + B - 2 \cdot A \cdot N_u) \cdot (A + B + 2 \cdot A \cdot N_u)}\right]^2}}{\sqrt{N_u{}^2 \cdot (A+B)^2} \cdot \left[A + B + \sqrt{(A + B - 2 \cdot A \cdot N_u) \cdot (A + B + 2 \cdot A \cdot N_u)}\right]}$$

0, 0, 3, 0:

$$\frac{C \cdot N_u \cdot \sqrt{\left[2 \cdot C + \sqrt{(2 \cdot C - 2 \cdot N_u) \cdot (2 \cdot C + 2 \cdot N_u)}\right]^2}}{\left[2 \cdot C + \sqrt{(2 \cdot C - 2 \cdot N_u) \cdot (2 \cdot C + 2 \cdot N_u)}\right] \cdot \sqrt{C^2 \cdot N_u{}^2}}$$

1, 0, 3, 0:

$$\frac{C \cdot N_u \cdot \sqrt{\left[\sqrt{(C + A \cdot C - 2 \cdot A \cdot N_u) \cdot (C + A \cdot C + 2 \cdot A \cdot N_u)} + C \cdot (A+1)\right]^2} \cdot (A+1)}{\left[C + A \cdot C + \sqrt{(C + A \cdot C - 2 \cdot A \cdot N_u) \cdot (C + A \cdot C + 2 \cdot A \cdot N_u)}\right] \cdot \sqrt{C^2 \cdot N_u{}^2 \cdot (A+1)^2}}$$

0, 2, 3, 0:

$$\frac{C \cdot N_u \cdot (B+1) \cdot \sqrt{\left[\sqrt{(C - 2 \cdot N_u + B \cdot C) \cdot (C + 2 \cdot N_u + B \cdot C)} + C \cdot (B+1)\right]^2}}{\sqrt{C^2 \cdot N_u{}^2 \cdot (B+1)^2} \cdot \left[C + \sqrt{(C - 2 \cdot N_u + B \cdot C) \cdot (C + 2 \cdot N_u + B \cdot C)} + B \cdot C\right]}$$

1, 2, 3, 0:

$$\frac{C \cdot N_u \cdot (A+B) \cdot \sqrt{\left[\sqrt{(A \cdot C + B \cdot C - 2 \cdot A \cdot N_u) \cdot (A \cdot C + B \cdot C + 2 \cdot A \cdot N_u)} + C \cdot (A+B)\right]^2}}{\left[\sqrt{(A \cdot C + B \cdot C - 2 \cdot A \cdot N_u) \cdot (A \cdot C + B \cdot C + 2 \cdot A \cdot N_u)} + A \cdot C + B \cdot C\right] \cdot \sqrt{C^2 \cdot N_u{}^2 \cdot (A+B)^2}}$$

0, 0, 0, 4:

$$\frac{N_u \cdot \sqrt{D^2 \cdot \left[\sqrt{-(2 \cdot N_u - 2) \cdot (2 \cdot N_u + 2)} + 2\right]^2}}{D \cdot \left[\sqrt{-(2 \cdot N_u - 2) \cdot (2 \cdot N_u + 2)} + 2\right] \cdot \sqrt{N_u^2}}$$

1, 0, 0, 4:

$$\frac{N_u \cdot \sqrt{D^2 \cdot \left[A + \sqrt{(A - 2 \cdot A \cdot N_u + 1) \cdot (A + 2 \cdot A \cdot N_u + 1)} + 1\right]^2} \cdot (A + 1)}{D \cdot \sqrt{N_u^2 \cdot (A + 1)^2} \cdot \left[A + \sqrt{(A - 2 \cdot A \cdot N_u + 1) \cdot (A + 2 \cdot A \cdot N_u + 1)} + 1\right]}$$

0, 2, 0, 4:

$$\frac{N_u \cdot (B + 1) \cdot \sqrt{D^2 \cdot \left[B + \sqrt{(B - 2 \cdot N_u + 1) \cdot (B + 2 \cdot N_u + 1)} + 1\right]^2}}{D \cdot \sqrt{N_u^2 \cdot (B + 1)^2} \cdot \left[B + \sqrt{(B - 2 \cdot N_u + 1) \cdot (B + 2 \cdot N_u + 1)} + 1\right]}$$

1, 2, 0, 4:

$$\frac{N_u \cdot (A + B) \cdot \sqrt{D^2 \cdot \left[A + B + \sqrt{(A + B - 2 \cdot A \cdot N_u) \cdot (A + B + 2 \cdot A \cdot N_u)}\right]^2}}{D \cdot \sqrt{N_u^2 \cdot (A + B)^2} \cdot \left[A + B + \sqrt{(A + B - 2 \cdot A \cdot N_u) \cdot (A + B + 2 \cdot A \cdot N_u)}\right]}$$

0, 0, 3, 4:

$$\frac{C \cdot N_u \cdot \sqrt{D^2 \cdot \left[2 \cdot C + \sqrt{(2 \cdot C - 2 \cdot N_u) \cdot (2 \cdot C + 2 \cdot N_u)}\right]^2}}{D \cdot \left[2 \cdot C + \sqrt{(2 \cdot C - 2 \cdot N_u) \cdot (2 \cdot C + 2 \cdot N_u)}\right] \cdot \sqrt{C^2 \cdot N_u^2}}$$

1, 0, 3, 4:

$$\frac{C \cdot N_u \cdot \sqrt{D^2 \cdot \left[\sqrt{(C + A \cdot C - 2 \cdot A \cdot N_u) \cdot (C + A \cdot C + 2 \cdot A \cdot N_u)} + C \cdot (A + 1)\right]^2} \cdot (A + 1)}{D \cdot \left[C + A \cdot C + \sqrt{(C + A \cdot C - 2 \cdot A \cdot N_u) \cdot (C + A \cdot C + 2 \cdot A \cdot N_u)}\right] \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A + 1)^2}}$$

0, 2, 3, 4:

$$\frac{C \cdot N_u \cdot (B + 1) \cdot \sqrt{D^2 \cdot \left[\sqrt{(C - 2 \cdot N_u + B \cdot C) \cdot (C + 2 \cdot N_u + B \cdot C)} + C \cdot (B + 1)\right]^2}}{D \cdot \sqrt{C^2 \cdot N_u^2 \cdot (B + 1)^2} \cdot \left[C + \sqrt{(C - 2 \cdot N_u + B \cdot C) \cdot (C + 2 \cdot N_u + B \cdot C)} + B \cdot C\right]}$$

1, 2, 3, 4:

$$\frac{C \cdot N_u \cdot (A + B) \cdot \sqrt{D^2 \cdot \left[\sqrt{(A \cdot C + B \cdot C - 2 \cdot A \cdot N_u) \cdot (A \cdot C + B \cdot C + 2 \cdot A \cdot N_u)} + C \cdot (A + B)\right]^2}}{D \cdot \left[\sqrt{(A \cdot C + B \cdot C - 2 \cdot A \cdot N_u) \cdot (A \cdot C + B \cdot C + 2 \cdot A \cdot N_u)} + A \cdot C + B \cdot C\right] \cdot \sqrt{C^2 \cdot N_u^2 \cdot (A + B)^2}}$$

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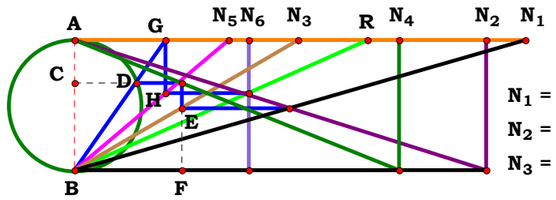

$N_1 = 3.45523$
$N_2 = 3.15497$
$N_3 = 1.71652$
$N_4 = 2.48902$
$N_5 = 1.17758$
$N_6 = 1.33636$
$R = 2.24660$

Unit. $AB := 1$ Given. $N_1 := 3.45523$ $N_2 := 3.15497$ $N_3 := 1.71652$

$N_4 := 2.48902$ $N_5 := 1.17758$ $N_6 := 1.33636$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u^{2}\cdot\sqrt{A\cdot D}\cdot\sqrt{A\cdot(C-D)+B\cdot C}}{A\cdot D\cdot E\cdot F} = 2.246592$$

$$Num := \frac{N_u^{2}\cdot\sqrt{A\cdot D}\cdot\sqrt{A\cdot(C-D)+B\cdot C}}{\sqrt{\left[N_u^{2}\cdot\sqrt{A\cdot D}\cdot\sqrt{A\cdot(C-D)+B\cdot C}\right]^{2}}} \qquad Den := \frac{A\cdot D\cdot E\cdot F}{\sqrt{(A\cdot D\cdot E\cdot F)^{2}}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^{2}\cdot\sqrt{A\cdot D}\cdot\sqrt{B\cdot C+A\cdot(C-D)}\cdot\sqrt{A^{2}\cdot D^{2}\cdot E^{2}\cdot F^{2}}}{A\cdot D\cdot E\cdot F\cdot\sqrt{A\cdot D\cdot N_u^{4}\cdot[B\cdot C+A\cdot(C-D)]}} = 0$$

For 6 variables there are 64 subsets.

0, 0, 0, 0, 0, 0: $$\frac{N_u^{\,2}}{\sqrt{N_u^{\,4}}}$$

1, 0, 0, 0, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{A^2}}{\sqrt{A}\cdot\sqrt{A\cdot N_u^{\,4}}}$$

0, 2, 0, 0, 0, 0: $$\frac{\sqrt{B}\cdot N_u^{\,2}}{\sqrt{B\cdot N_u^{\,4}}}$$

1, 2, 0, 0, 0, 0: $$\frac{\sqrt{B}\cdot N_u^{\,2}\cdot\sqrt{A^2}}{\sqrt{A}\cdot\sqrt{A\cdot B\cdot N_u^{\,4}}}$$

0, 0, 3, 0, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{2\cdot C-1}}{\sqrt{N_u^{\,4}\cdot(2\cdot C-1)}}$$

1, 0, 3, 0, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{A^2}\cdot\sqrt{C+A\cdot(C-1)}}{\sqrt{A}\cdot\sqrt{A\cdot N_u^{\,4}\cdot[C+A\cdot(C-1)]}}$$

0, 2, 3, 0, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{C+B\cdot C-1}}{\sqrt{N_u^{\,4}\cdot(C+B\cdot C-1)}}$$

1, 2, 3, 0, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{A^2}\cdot\sqrt{B\cdot C+A\cdot(C-1)}}{\sqrt{A}\cdot\sqrt{A\cdot N_u^{\,4}\cdot[B\cdot C+A\cdot(C-1)]}}$$

0, 0, 0, 4, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{2-D}\cdot\sqrt{D^2}}{\sqrt{D}\cdot\sqrt{-D\cdot N_u^{\,4}\cdot(D-2)}}$$

1, 0, 0, 4, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{1-A\cdot(D-1)}\cdot\sqrt{A^2\cdot D^2}\cdot\sqrt{A\cdot D}}{A\cdot D\cdot\sqrt{-A\cdot D\cdot N_u^{\,4}\cdot[A\cdot(D-1)-1]}}$$

0, 2, 0, 4, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{D^2}\cdot\sqrt{B-D+1}}{\sqrt{D}\cdot\sqrt{D\cdot N_u^{\,4}\cdot(B-D+1)}}$$

1, 2, 0, 4, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{A^2\cdot D^2}\cdot\sqrt{A\cdot D}\cdot\sqrt{B-A\cdot(D-1)}}{A\cdot D\cdot\sqrt{A\cdot D\cdot N_u^{\,4}\cdot[B-A\cdot(D-1)]}}$$

0, 0, 3, 4, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{D^2}\cdot\sqrt{2\cdot C-D}}{\sqrt{D}\cdot\sqrt{-D\cdot N_u^{\,4}\cdot(D-2\cdot C)}}$$

1, 0, 3, 4, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{C+A\cdot(C-D)}\cdot\sqrt{A^2\cdot D^2}\cdot\sqrt{A\cdot D}}{A\cdot D\cdot\sqrt{A\cdot D\cdot N_u^{\,4}\cdot[C+A\cdot(C-D)]}}$$

0, 2, 3, 4, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{D^2}\cdot\sqrt{C-D+B\cdot C}}{\sqrt{D}\cdot\sqrt{D\cdot N_u^{\,4}\cdot(C-D+B\cdot C)}}$$

1, 2, 3, 4, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{A^2\cdot D^2}\cdot\sqrt{A\cdot D}\cdot\sqrt{B\cdot C+A\cdot(C-D)}}{A\cdot D\cdot\sqrt{A\cdot D\cdot N_u^{\,4}\cdot[B\cdot C+A\cdot(C-D)]}}$$

0, 0, 0, 0, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{E^2}}{E\cdot\sqrt{N_u^{\,4}}}$$

1, 0, 0, 0, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{A^2\cdot E^2}}{\sqrt{A}\cdot E\cdot\sqrt{A\cdot N_u^{\,4}}}$$

0, 2, 0, 0, 5, 0: $$\frac{\sqrt{B}\cdot N_u^{\,2}\cdot\sqrt{E^2}}{E\cdot\sqrt{B\cdot N_u^{\,4}}}$$

1, 2, 0, 0, 5, 0: $$\frac{\sqrt{B}\cdot N_u^{\,2}\cdot\sqrt{A^2\cdot E^2}}{\sqrt{A}\cdot E\cdot\sqrt{A\cdot B\cdot N_u^{\,4}}}$$

0, 0, 3, 0, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{E^2}\cdot\sqrt{2\cdot C-1}}{E\cdot\sqrt{N_u^{\,4}\cdot(2\cdot C-1)}}$$

1, 0, 3, 0, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{A^2\cdot E^2}\cdot\sqrt{C+A\cdot(C-1)}}{\sqrt{A}\cdot E\cdot\sqrt{A\cdot N_u^{\,4}\cdot[C+A\cdot(C-1)]}}$$

0, 2, 3, 0, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{E^2}\cdot\sqrt{C+B\cdot C-1}}{E\cdot\sqrt{N_u^{\,4}\cdot(C+B\cdot C-1)}}$$

1, 2, 3, 0, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{B\cdot C+A\cdot(C-1)}\cdot\sqrt{A^2\cdot E^2}}{\sqrt{A}\cdot E\cdot\sqrt{A\cdot N_u^{\,4}\cdot[B\cdot C+A\cdot(C-1)]}}$$

0, 0, 0, 4, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{2-D}\cdot\sqrt{D^2\cdot E^2}}{\sqrt{D}\cdot E\cdot\sqrt{-D\cdot N_u^{\,4}\cdot(D-2)}}$$

1, 0, 0, 4, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{1-A\cdot(D-1)}\cdot\sqrt{A\cdot D}\cdot\sqrt{A^2\cdot D^2\cdot E^2}}{A\cdot D\cdot E\cdot\sqrt{-A\cdot D\cdot N_u^{\,4}\cdot[A\cdot(D-1)-1]}}$$

0, 2, 0, 4, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{D^2\cdot E^2}\cdot\sqrt{B-D+1}}{\sqrt{D}\cdot E\cdot\sqrt{D\cdot N_u^{\,4}\cdot(B-D+1)}}$$

1, 2, 0, 4, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{A\cdot D}\cdot\sqrt{B-A\cdot(D-1)}\cdot\sqrt{A^2\cdot D^2\cdot E^2}}{A\cdot D\cdot E\cdot\sqrt{A\cdot D\cdot N_u^{\,4}\cdot[B-A\cdot(D-1)]}}$$

0, 0, 3, 4, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{D^2\cdot E^2}\cdot\sqrt{2\cdot C-D}}{\sqrt{D}\cdot E\cdot\sqrt{-D\cdot N_u^{\,4}\cdot(D-2\cdot C)}}$$

1, 0, 3, 4, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{C+A\cdot(C-D)}\cdot\sqrt{A\cdot D}\cdot\sqrt{A^2\cdot D^2\cdot E^2}}{A\cdot D\cdot E\cdot\sqrt{A\cdot D\cdot N_u^{\,4}\cdot[C+A\cdot(C-D)]}}$$

0, 2, 3, 4, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{D^2\cdot E^2}\cdot\sqrt{C-D+B\cdot C}}{\sqrt{D}\cdot E\cdot\sqrt{D\cdot N_u^{\,4}\cdot(C-D+B\cdot C)}}$$

1, 2, 3, 4, 5, 0: $$\frac{N_u^{\,2}\cdot\sqrt{A\cdot D}\cdot\sqrt{B\cdot C+A\cdot(C-D)}\cdot\sqrt{A^2\cdot D^2\cdot E^2}}{A\cdot D\cdot E\cdot\sqrt{A\cdot D\cdot N_u^{\,4}\cdot[B\cdot C+A\cdot(C-D)]}}$$

0, 0, 0, 0, 0, 6: $\frac{N_u^2 \cdot \sqrt{F^2}}{F \cdot \sqrt{N_u^4}}$

1, 0, 0, 0, 0, 6: $\frac{N_u^2 \cdot \sqrt{A^2 \cdot F^2}}{\sqrt{A} \cdot F \cdot \sqrt{A \cdot N_u^4}}$

0, 2, 0, 0, 0, 6: $\frac{\sqrt{B} \cdot N_u^2 \cdot \sqrt{F^2}}{F \cdot \sqrt{B \cdot N_u^4}}$

1, 2, 0, 0, 0, 6: $\frac{\sqrt{B} \cdot N_u^2 \cdot \sqrt{A^2 \cdot F^2}}{\sqrt{A} \cdot F \cdot \sqrt{A \cdot B \cdot N_u^4}}$

0, 0, 3, 0, 0, 6: $\frac{N_u^2 \cdot \sqrt{F^2} \cdot \sqrt{2 \cdot C - 1}}{F \cdot \sqrt{N_u^4 \cdot (2 \cdot C - 1)}}$

1, 0, 3, 0, 0, 6: $\frac{N_u^2 \cdot \sqrt{A^2 \cdot F^2} \cdot \sqrt{C + A \cdot (C - 1)}}{\sqrt{A} \cdot F \cdot \sqrt{A \cdot N_u^4 \cdot [C + A \cdot (C - 1)]}}$

0, 2, 3, 0, 0, 6: $\frac{N_u^2 \cdot \sqrt{F^2} \cdot \sqrt{C + B \cdot C - 1}}{F \cdot \sqrt{N_u^4 \cdot (C + B \cdot C - 1)}}$

1, 2, 3, 0, 0, 6: $\frac{N_u^2 \cdot \sqrt{B \cdot C + A \cdot (C - 1)} \cdot \sqrt{A^2 \cdot F^2}}{\sqrt{A} \cdot F \cdot \sqrt{A \cdot N_u^4 \cdot [B \cdot C + A \cdot (C - 1)]}}$

0, 0, 0, 4, 0, 6: $\frac{N_u^2 \cdot \sqrt{2 - D} \cdot \sqrt{D^2 \cdot F^2}}{\sqrt{D} \cdot F \cdot \sqrt{-D \cdot N_u^4 \cdot (D - 2)}}$

1, 0, 0, 4, 0, 6: $\frac{N_u^2 \cdot \sqrt{1 - A \cdot (D - 1)} \cdot \sqrt{A \cdot D} \cdot \sqrt{A^2 \cdot D^2 \cdot F^2}}{A \cdot D \cdot F \cdot \sqrt{-A \cdot D \cdot N_u^4 \cdot [A \cdot (D - 1) - 1]}}$

0, 2, 0, 4, 0, 6: $\frac{N_u^2 \cdot \sqrt{D^2 \cdot F^2} \cdot \sqrt{B - D + 1}}{\sqrt{D} \cdot F \cdot \sqrt{D \cdot N_u^4 \cdot (B - D + 1)}}$

1, 2, 0, 4, 0, 6: $\frac{N_u^2 \cdot \sqrt{A \cdot D} \cdot \sqrt{B - A \cdot (D - 1)} \cdot \sqrt{A^2 \cdot D^2 \cdot F^2}}{A \cdot D \cdot F \cdot \sqrt{A \cdot D \cdot N_u^4 \cdot [B - A \cdot (D - 1)]}}$

0, 0, 3, 4, 0, 6: $\frac{N_u^2 \cdot \sqrt{D^2 \cdot F^2} \cdot \sqrt{2 \cdot C - D}}{\sqrt{D} \cdot F \cdot \sqrt{-D \cdot N_u^4 \cdot (D - 2 \cdot C)}}$

1, 0, 3, 4, 0, 6: $\frac{N_u^2 \cdot \sqrt{C + A \cdot (C - D)} \cdot \sqrt{A \cdot D} \cdot \sqrt{A^2 \cdot D^2 \cdot F^2}}{A \cdot D \cdot F \cdot \sqrt{A \cdot D \cdot N_u^4 \cdot [C + A \cdot (C - D)]}}$

0, 2, 3, 4, 0, 6: $\frac{N_u^2 \cdot \sqrt{D^2 \cdot F^2} \cdot \sqrt{C - D + B \cdot C}}{\sqrt{D} \cdot F \cdot \sqrt{D \cdot N_u^4 \cdot (C - D + B \cdot C)}}$

1, 2, 3, 4, 0, 6: $\frac{N_u^2 \cdot \sqrt{A \cdot D} \cdot \sqrt{B \cdot C + A \cdot (C - D)} \cdot \sqrt{A^2 \cdot D^2 \cdot F^2}}{A \cdot D \cdot F \cdot \sqrt{A \cdot D \cdot N_u^4 \cdot [B \cdot C + A \cdot (C - D)]}}$

0, 0, 0, 0, 5, 6: $$\frac{N_u^2 \cdot \sqrt{E^2 \cdot F^2}}{E \cdot F \cdot \sqrt{N_u^4}}$$

1, 0, 0, 0, 5, 6: $$\frac{N_u^2 \cdot \sqrt{A^2 \cdot E^2 \cdot F^2}}{\sqrt{A} \cdot E \cdot F \cdot \sqrt{A \cdot N_u^4}}$$

0, 2, 0, 0, 5, 6: $$\frac{\sqrt{B} \cdot N_u^2 \cdot \sqrt{E^2 \cdot F^2}}{E \cdot F \cdot \sqrt{B \cdot N_u^4}}$$

1, 2, 0, 0, 5, 6: $$\frac{\sqrt{B} \cdot N_u^2 \cdot \sqrt{A^2 \cdot E^2 \cdot F^2}}{\sqrt{A} \cdot E \cdot F \cdot \sqrt{A \cdot B \cdot N_u^4}}$$

0, 0, 3, 0, 5, 6: $$\frac{N_u^2 \cdot \sqrt{E^2 \cdot F^2} \cdot \sqrt{2 \cdot C - 1}}{E \cdot F \cdot \sqrt{N_u^4 \cdot (2 \cdot C - 1)}}$$

1, 0, 3, 0, 5, 6: $$\frac{N_u^2 \cdot \sqrt{C + A \cdot (C - 1)} \cdot \sqrt{A^2 \cdot E^2 \cdot F^2}}{\sqrt{A} \cdot E \cdot F \cdot \sqrt{A \cdot N_u^4 \cdot [C + A \cdot (C - 1)]}}$$

0, 2, 3, 0, 5, 6: $$\frac{N_u^2 \cdot \sqrt{E^2 \cdot F^2} \cdot \sqrt{C + B \cdot C - 1}}{E \cdot F \cdot \sqrt{N_u^4 \cdot (C + B \cdot C - 1)}}$$

1, 2, 3, 0, 5, 6: $$\frac{N_u^2 \cdot \sqrt{B \cdot C + A \cdot (C - 1)} \cdot \sqrt{A^2 \cdot E^2 \cdot F^2}}{\sqrt{A} \cdot E \cdot F \cdot \sqrt{A \cdot N_u^4 \cdot [B \cdot C + A \cdot (C - 1)]}}$$

0, 0, 0, 4, 5, 6: $$\frac{N_u^2 \cdot \sqrt{2 - D} \cdot \sqrt{D^2 \cdot E^2 \cdot F^2}}{\sqrt{D} \cdot E \cdot F \cdot \sqrt{-D \cdot N_u^4 \cdot (D - 2)}}$$

1, 0, 0, 4, 5, 6: $$\frac{N_u^2 \cdot \sqrt{1 - A \cdot (D - 1)} \cdot \sqrt{A \cdot D} \cdot \sqrt{A^2 \cdot D^2 \cdot E^2 \cdot F^2}}{A \cdot D \cdot E \cdot F \cdot \sqrt{-A \cdot D \cdot N_u^4 \cdot [A \cdot (D - 1) - 1]}}$$

0, 2, 0, 4, 5, 6: $$\frac{N_u^2 \cdot \sqrt{D^2 \cdot E^2 \cdot F^2} \cdot \sqrt{B - D + 1}}{\sqrt{D} \cdot E \cdot F \cdot \sqrt{D \cdot N_u^4 \cdot (B - D + 1)}}$$

1, 2, 0, 4, 5, 6: $$\frac{N_u^2 \cdot \sqrt{A \cdot D} \cdot \sqrt{B - A \cdot (D - 1)} \cdot \sqrt{A^2 \cdot D^2 \cdot E^2 \cdot F^2}}{A \cdot D \cdot E \cdot F \cdot \sqrt{A \cdot D \cdot N_u^4 \cdot [B - A \cdot (D - 1)]}}$$

0, 0, 3, 4, 5, 6: $$\frac{N_u^2 \cdot \sqrt{2 \cdot C - D} \cdot \sqrt{D^2 \cdot E^2 \cdot F^2}}{\sqrt{D} \cdot E \cdot F \cdot \sqrt{-D \cdot N_u^4 \cdot (D - 2 \cdot C)}}$$

1, 0, 3, 4, 5, 6: $$\frac{N_u^2 \cdot \sqrt{C + A \cdot (C - D)} \cdot \sqrt{A \cdot D} \cdot \sqrt{A^2 \cdot D^2 \cdot E^2 \cdot F^2}}{A \cdot D \cdot E \cdot F \cdot \sqrt{A \cdot D \cdot N_u^4 \cdot [C + A \cdot (C - D)]}}$$

0, 2, 3, 4, 5, 6: $$\frac{N_u^2 \cdot \sqrt{D^2 \cdot E^2 \cdot F^2} \cdot \sqrt{C - D + B \cdot C}}{\sqrt{D} \cdot E \cdot F \cdot \sqrt{D \cdot N_u^4 \cdot (C - D + B \cdot C)}}$$

1, 2, 3, 4, 5, 6: $$\frac{N_u^2 \cdot \sqrt{A \cdot D} \cdot \sqrt{B \cdot C + A \cdot (C - D)} \cdot \sqrt{A^2 \cdot D^2 \cdot E^2 \cdot F^2}}{A \cdot D \cdot E \cdot F \cdot \sqrt{A \cdot D \cdot N_u^4 \cdot [B \cdot C + A \cdot (C - D)]}}$$

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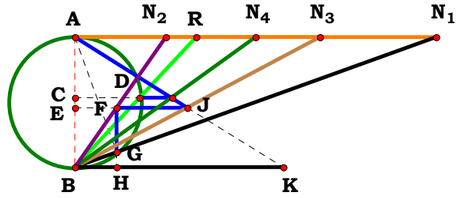


$N_1 = 2.76754$
$N_2 = 0.69478$
$N_3 = 1.88118$
$N_4 = 1.38484$
$R = 0.92960$

Unit. $AB := 1$ Given. $N_1 := 2.76754$ $N_2 := .69478$ $N_3 := 1.88118$

$N_4 := 1.38484$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{C \cdot \sqrt{A^2 - B \cdot A + N_u^2}}{\sqrt{A \cdot B \cdot C \cdot D}} = 0.9296$$

$$Num := \frac{C \cdot \sqrt{A^2 - B \cdot A + N_u^2}}{\sqrt{\left(C \cdot \sqrt{A^2 - B \cdot A + N_u^2}\right)^2}}$$

$$Den := \frac{\sqrt{A \cdot B \cdot C \cdot D}}{\sqrt{\left(\sqrt{A \cdot B \cdot C \cdot D}\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

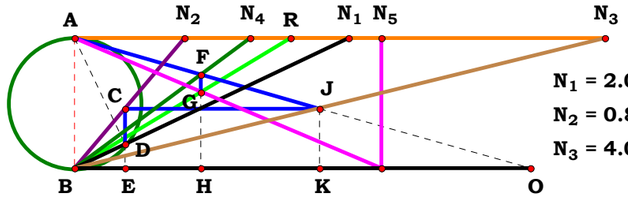
$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot \sqrt{A^2 - B \cdot A + N_u^2}}{\sqrt{C^2 \cdot \left(A^2 - B \cdot A + N_u^2\right)}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:	**1**	**0, 0, 3, 0:**	$\frac{C\cdot\sqrt{N_u^{\,2}}}{\sqrt{C^2\cdot N_u^{\,2}}}$	**0, 0, 0, 4:**	**1**	**0, 0, 3, 4:**	$\frac{C\cdot\sqrt{N_u^{\,2}}}{\sqrt{C^2\cdot N_u^{\,2}}}$
1, 0, 0, 0:	**1**	**1, 0, 3, 0:**	$\frac{C\cdot\sqrt{A^2-A+N_u^{\,2}}}{\sqrt{C^2\cdot\left(A^2-A+N_u^{\,2}\right)}}$	**1, 0, 0, 4:**	**1**	**1, 0, 3, 4:**	$\frac{C\cdot\sqrt{A^2-A+N_u^{\,2}}}{\sqrt{C^2\cdot\left(A^2-A+N_u^{\,2}\right)}}$
0, 2, 0, 0:	**1**	**0, 2, 3, 0:**	$\frac{C\cdot\sqrt{N_u^{\,2}-B+1}}{\sqrt{C^2\cdot\left(N_u^{\,2}-B+1\right)}}$	**0, 2, 0, 4:**	**1**	**0, 2, 3, 4:**	$\frac{C\cdot\sqrt{N_u^{\,2}-B+1}}{\sqrt{C^2\cdot\left(N_u^{\,2}-B+1\right)}}$
1, 2, 0, 0:	**1**	**1, 2, 3, 0:**	$\frac{C\cdot\sqrt{A^2-B\cdot A+N_u^{\,2}}}{\sqrt{C^2\cdot\left(A^2-B\cdot A+N_u^{\,2}\right)}}$	**1, 2, 0, 4:**	**1**	**1, 2, 3, 4:**	$\frac{C\cdot\sqrt{A^2-B\cdot A+N_u^{\,2}}}{\sqrt{C^2\cdot\left(A^2-B\cdot A+N_u^{\,2}\right)}}$

2SMT6R10



$N_1 = 2.09922$ $N_4 = 1.34610$

$N_2 = 0.84007$ $N_5 = 2.34956$

$N_3 = 4.07016$ $R = 1.65787$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := .84007$ $N_3 := 4.07016$

$N_4 := 1.34610$ $N_5 := 2.34956$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot B \cdot N_u}{C \cdot \left(A^2 + N_u{}^2\right) - A \cdot B \cdot (C - D + E)} = 1.657883$$

$$Num := \frac{A \cdot B \cdot N_u}{\sqrt{\left(A \cdot B \cdot N_u\right)^2}}$$

$$Den := \frac{C \cdot \left(A^2 + N_u{}^2\right) - A \cdot B \cdot (C - D + E)}{\sqrt{\left[C \cdot \left(A^2 + N_u{}^2\right) - A \cdot B \cdot (C - D + E)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot B \cdot N_u \cdot \sqrt{\left[C \cdot \left(A^2 + N_u{}^2\right) - A \cdot B \cdot (C - D + E)\right]^2}}{\left(A^2 \cdot C + C \cdot N_u{}^2 - A \cdot B \cdot C + A \cdot B \cdot D - A \cdot B \cdot E\right) \cdot \sqrt{A^2 \cdot B^2 \cdot N_u{}^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0:

$$\frac{\sqrt{N_u^{\,4}}}{N_u \cdot \sqrt{N_u^{\,2}}}$$

1, 0, 0, 0, 0:

$$\frac{A \cdot N_u \cdot \sqrt{\left(A^2 - A + N_u^{\,2}\right)^2}}{\sqrt{A^2 \cdot N_u^{\,2}} \cdot \left(A^2 - A + N_u^{\,2}\right)}$$

0, 2, 0, 0, 0:

$$\frac{B \cdot N_u \cdot \sqrt{\left(N_u^{\,2} - B + 1\right)^2}}{\sqrt{B^2 \cdot N_u^{\,2}} \cdot \left(N_u^{\,2} - B + 1\right)}$$

1, 2, 0, 0, 0:

$$\frac{A \cdot B \cdot N_u \cdot \sqrt{\left(A^2 - B \cdot A + N_u^{\,2}\right)^2}}{\sqrt{A^2 \cdot B^2 \cdot N_u^{\,2}} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}$$

0, 0, 3, 0, 0:

$$\frac{\sqrt{\left[C - C \cdot \left(N_u^{\,2} + 1\right)\right]^2}}{C \cdot N_u \cdot \sqrt{N_u^{\,2}}}$$

1, 0, 3, 0, 0:

$$\frac{A \cdot N_u \cdot \sqrt{\left[C \cdot \left(A^2 + N_u^{\,2}\right) - A \cdot C\right]^2}}{\sqrt{A^2 \cdot N_u^{\,2}} \cdot \left(C \cdot A^2 - C \cdot A + C \cdot N_u^{\,2}\right)}$$

0, 2, 3, 0, 0:

$$\frac{B \cdot N_u \cdot \sqrt{\left[C \cdot \left(N_u^{\,2} + 1\right) - B \cdot C\right]^2}}{\sqrt{B^2 \cdot N_u^{\,2}} \cdot \left(C \cdot N_u^{\,2} + C - B \cdot C\right)}$$

1, 2, 3, 0, 0:

$$\frac{A \cdot B \cdot N_u \cdot \sqrt{\left[C \cdot \left(A^2 + N_u^{\,2}\right) - A \cdot B \cdot C\right]^2}}{\left(C \cdot A^2 - B \cdot C \cdot A + C \cdot N_u^{\,2}\right) \cdot \sqrt{A^2 \cdot B^2 \cdot N_u^{\,2}}}$$

0, 0, 0, 4, 0:

$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2} + D - 1\right)^2}}{\sqrt{N_u^{\,2}} \cdot \left(N_u^{\,2} + D - 1\right)}$$

1, 0, 0, 4, 0:

$$\frac{A \cdot N_u \cdot \sqrt{\left[A^2 + (D - 2) \cdot A + N_u^{\,2}\right]^2}}{\sqrt{A^2 \cdot N_u^{\,2}} \cdot \left(A^2 - 2 \cdot A + N_u^{\,2} + A \cdot D\right)}$$

0, 2, 0, 4, 0:

$$\frac{B \cdot N_u \cdot \sqrt{\left[N_u^{\,2} + B \cdot (D - 2) + 1\right]^2}}{\sqrt{B^2 \cdot N_u^{\,2}} \cdot \left(N_u^{\,2} - 2 \cdot B + B \cdot D + 1\right)}$$

1, 2, 0, 4, 0:

$$\frac{A \cdot B \cdot N_u \cdot \sqrt{\left[A^2 + B \cdot (D - 2) \cdot A + N_u^{\,2}\right]^2}}{\sqrt{A^2 \cdot B^2 \cdot N_u^{\,2}} \cdot \left(A^2 + N_u^{\,2} - 2 \cdot A \cdot B + A \cdot B \cdot D\right)}$$

0, 0, 3, 4, 0:

$$\frac{N_u \cdot \sqrt{\left[C - D - C \cdot \left(N_u^{\,2} + 1\right) + 1\right]^2}}{\sqrt{N_u^{\,2}} \cdot \left(C \cdot N_u^{\,2} + D - 1\right)}$$

1, 0, 3, 4, 0:

$$\frac{A \cdot N_u \cdot \sqrt{\left[C \cdot \left(A^2 + N_u^{\,2}\right) - A \cdot (C - D + 1)\right]^2}}{\sqrt{A^2 \cdot N_u^{\,2}} \cdot \left(A \cdot D - A \cdot C - A + A^2 \cdot C + C \cdot N_u^{\,2}\right)}$$

0, 2, 3, 4, 0:

$$\frac{B \cdot N_u \cdot \sqrt{\left[C \cdot \left(N_u^{\,2} + 1\right) - B \cdot (C - D + 1)\right]^2}}{\sqrt{B^2 \cdot N_u^{\,2}} \cdot \left(C \cdot N_u^{\,2} - B + C - B \cdot C + B \cdot D\right)}$$

1, 2, 3, 4, 0:

$$\frac{A \cdot B \cdot N_u \cdot \sqrt{\left[C \cdot \left(A^2 + N_u^{\,2}\right) - A \cdot B \cdot (C - D + 1)\right]^2}}{\sqrt{A^2 \cdot B^2 \cdot N_u^{\,2}} \cdot \left(A^2 \cdot C - A \cdot B + C \cdot N_u^{\,2} - A \cdot B \cdot C + A \cdot B \cdot D\right)}$$

0, 0, 0, 0, 5:

$$\frac{N_u \cdot \sqrt{\left(N_u^2 - E + 1\right)^2}}{\sqrt{N_u^2} \cdot \left(N_u^2 - E + 1\right)}$$

1, 0, 0, 0, 5:

$$\frac{A \cdot N_u \cdot \sqrt{\left(A^2 - E \cdot A + N_u^2\right)^2}}{\sqrt{A^2 \cdot N_u^2} \cdot \left(A^2 - E \cdot A + N_u^2\right)}$$

0, 2, 0, 0, 5:

$$\frac{B \cdot N_u \cdot \sqrt{\left(N_u^2 - B \cdot E + 1\right)^2}}{\sqrt{B^2 \cdot N_u^2} \cdot \left(N_u^2 - B \cdot E + 1\right)}$$

1, 2, 0, 0, 5:

$$\frac{A \cdot B \cdot N_u \cdot \sqrt{\left(A^2 - B \cdot E \cdot A + N_u^2\right)^2}}{\sqrt{A^2 \cdot B^2 \cdot N_u^2} \cdot \left(A^2 - B \cdot E \cdot A + N_u^2\right)}$$

0, 0, 3, 0, 5:

$$\frac{N_u \cdot \sqrt{\left[C + E - C \cdot \left(N_u^2 + 1\right) - 1\right]^2}}{\sqrt{N_u^2} \cdot \left(C \cdot N_u^2 - E + 1\right)}$$

1, 0, 3, 0, 5:

$$\frac{A \cdot N_u \cdot \sqrt{\left[C \cdot \left(A^2 + N_u^2\right) - A \cdot (C + E - 1)\right]^2}}{\sqrt{A^2 \cdot N_u^2} \cdot \left(A - A \cdot C - A \cdot E + A^2 \cdot C + C \cdot N_u^2\right)}$$

0, 2, 3, 0, 5:

$$\frac{B \cdot N_u \cdot \sqrt{\left[B \cdot (C + E - 1) - C \cdot \left(N_u^2 + 1\right)\right]^2}}{\sqrt{B^2 \cdot N_u^2} \cdot \left(C \cdot N_u^2 + B + C - B \cdot C - B \cdot E\right)}$$

1, 2, 3, 0, 5:

$$\frac{A \cdot B \cdot N_u \cdot \sqrt{\left[C \cdot \left(A^2 + N_u^2\right) - A \cdot B \cdot (C + E - 1)\right]^2}}{\sqrt{A^2 \cdot B^2 \cdot N_u^2} \cdot \left(A \cdot B + A^2 \cdot C + C \cdot N_u^2 - A \cdot B \cdot C - A \cdot B \cdot E\right)}$$

0, 0, 0, 4, 5:

$$\frac{N_u \cdot \sqrt{\left(N_u^2 + D - E\right)^2}}{\sqrt{N_u^2} \cdot \left(N_u^2 + D - E\right)}$$

1, 0, 0, 4, 5:

$$\frac{A \cdot N_u \cdot \sqrt{\left[A^2 + N_u^2 - A \cdot (E - D + 1)\right]^2}}{\sqrt{A^2 \cdot N_u^2} \cdot \left(A^2 - A + N_u^2 + A \cdot D - A \cdot E\right)}$$

0, 2, 0, 4, 5:

$$\frac{B \cdot N_u \cdot \sqrt{\left[N_u^2 - B \cdot (E - D + 1) + 1\right]^2}}{\sqrt{B^2 \cdot N_u^2} \cdot \left(N_u^2 - B + B \cdot D - B \cdot E + 1\right)}$$

1, 2, 0, 4, 5:

$$\frac{A \cdot B \cdot N_u \cdot \sqrt{\left[A^2 + N_u^2 - A \cdot B \cdot (E - D + 1)\right]^2}}{\sqrt{A^2 \cdot B^2 \cdot N_u^2} \cdot \left(A^2 + N_u^2 - A \cdot B + A \cdot B \cdot D - A \cdot B \cdot E\right)}$$

0, 0, 3, 4, 5:

$$\frac{N_u \cdot \sqrt{\left[C - D + E - C \cdot \left(N_u^2 + 1\right)\right]^2}}{\sqrt{N_u^2} \cdot \left(C \cdot N_u^2 + D - E\right)}$$

1, 0, 3, 4, 5:

$$\frac{A \cdot N_u \cdot \sqrt{\left[C \cdot \left(A^2 + N_u^2\right) - A \cdot (C - D + E)\right]^2}}{\sqrt{A^2 \cdot N_u^2} \cdot \left(A \cdot D - A \cdot C - A \cdot E + A^2 \cdot C + C \cdot N_u^2\right)}$$

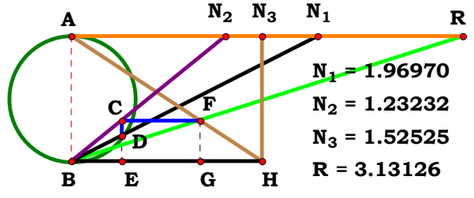
0, 2, 3, 4, 5:

$$\frac{B \cdot N_u \cdot \sqrt{\left[C \cdot \left(N_u^2 + 1\right) - B \cdot (C - D + E)\right]^2}}{\sqrt{B^2 \cdot N_u^2} \cdot \left(C \cdot N_u^2 + C - B \cdot C + B \cdot D - B \cdot E\right)}$$

1, 2, 3, 4, 5:

$$\frac{A \cdot B \cdot N_u \cdot \sqrt{\left[C \cdot \left(A^2 + N_u^2\right) - A \cdot B \cdot (C - D + E)\right]^2}}{\left(A^2 \cdot C + C \cdot N_u^2 - A \cdot B \cdot C + A \cdot B \cdot D - A \cdot B \cdot E\right) \cdot \sqrt{A^2 \cdot B^2 \cdot N_u^2}}$$

2SMT6R11



Unit. $AB := 1$ **Given.** $N_1 := 1.96970$ $N_2 := 1.23232$ $N_3 := 1.52525$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}{A \cdot B \cdot C} = 3.131245$$

$$Num := \frac{N_u \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}{\sqrt{\left[N_u \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)\right]^2}}$$

$$Den := \frac{A \cdot B \cdot C}{\sqrt{(A \cdot B \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^2 \cdot B^2 \cdot C^2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}{A \cdot B \cdot C \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u^{\,3}}{\sqrt{N_u^{\,6}}}$$

1, 0, 0: $$\frac{N_u \cdot \sqrt{A^2} \cdot \left(A^2 - A + N_u^{\,2}\right)}{A \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - A + N_u^{\,2}\right)^2}}$$

0, 2, 0: $$\frac{N_u \cdot \sqrt{B^2} \cdot \left(N_u^{\,2} - B + 1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - B + 1\right)^2}}$$

1, 2, 0: $$\frac{N_u \cdot \sqrt{A^2 \cdot B^2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}{A \cdot B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)^2}}$$

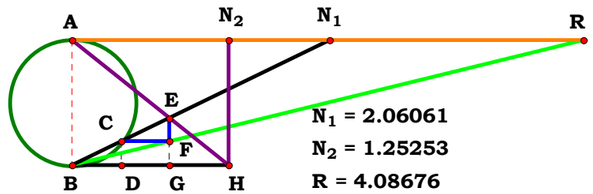
0, 0, 3: $$\frac{N_u^{\,3} \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^{\,6}}}$$

1, 0, 3: $$\frac{N_u \cdot \sqrt{A^2 \cdot C^2} \cdot \left(A^2 - A + N_u^{\,2}\right)}{A \cdot C \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - A + N_u^{\,2}\right)^2}}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{B^2 \cdot C^2} \cdot \left(N_u^{\,2} - B + 1\right)}{B \cdot C \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - B + 1\right)^2}}$$

1, 2, 3: $$\frac{N_u \cdot \sqrt{A^2 \cdot B^2 \cdot C^2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}{A \cdot B \cdot C \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)^2}}$$

2SMT6R12



Unit. $AB := 1$ **Given.** $N_1 := 2.06061$ $N_2 := 1.25253$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u{}^2\right)}{A^2 \cdot (A + B)} = 4.086785$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u{}^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{A^2 \cdot (A + B)}{\sqrt{\left[A^2 \cdot (A + B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^4 \cdot (A + B)^2} \cdot \left(A^2 + N_u{}^2\right)}{A^2 \cdot \sqrt{N_u{}^2 \cdot \left(A^2 + N_u{}^2\right)^2} \cdot (A + B)} = 0$$

For 2 variables there are 4 subsets.

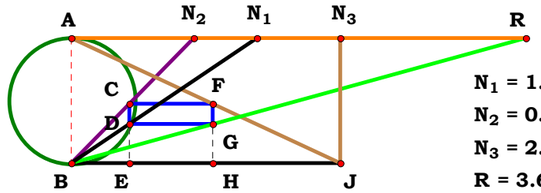
0, 0: $$\frac{N_u \cdot \left(N_u^{\,2} + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} + 1\right)^2}}$$

1, 0: $$\frac{N_u \cdot \left(A^2 + N_u^{\,2}\right) \cdot \sqrt{A^4 \cdot (A+1)^2}}{A^2 \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2}\right)^2} \cdot (A+1)}$$

0, 2: $$\frac{N_u \cdot \sqrt{(B+1)^2} \cdot \left(N_u^{\,2} + 1\right)}{(B+1) \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} + 1\right)^2}}$$

1, 2: $$\frac{N_u \cdot \sqrt{A^4 \cdot (A+B)^2} \cdot \left(A^2 + N_u^{\,2}\right)}{A^2 \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2}\right)^2} \cdot (A+B)}$$

2SMT6R13



$N_1 = 1.48485$
$N_2 = 0.97980$
$N_3 = 2.15152$
$R = 3.63458$

Unit. $AB := 1$ Given. $N_1 := 1.48485$ $N_2 := .97980$ $N_3 := 2.15152$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}{A^2 \cdot C} = 3.6346$$

$$Num := \frac{N_u \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}{\sqrt{\left[N_u \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)\right]^2}}$$

$$Den := \frac{A^2 \cdot C}{\sqrt{\left(A^2 \cdot C\right)^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^4 \cdot C^2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}{A^2 \cdot C \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u^{\,3}}{\sqrt{N_u^{\,6}}}$$

1, 0, 0: $$\frac{N_u \cdot \sqrt{A^4} \cdot \left(A^2 - A + N_u^{\,2}\right)}{A^2 \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - A + N_u^{\,2}\right)^2}}$$

0, 2, 0: $$\frac{N_u \cdot \left(N_u^{\,2} - B + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - B + 1\right)^2}}$$

1, 2, 0: $$\frac{N_u \cdot \sqrt{A^4} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}{A^2 \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)^2}}$$

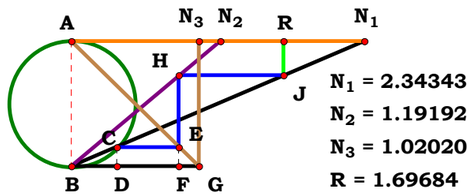
0, 0, 3: $$\frac{N_u^{\,3} \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^{\,6}}}$$

1, 0, 3: $$\frac{N_u \cdot \sqrt{A^4 \cdot C^2} \cdot \left(A^2 - A + N_u^{\,2}\right)}{A^2 \cdot C \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - A + N_u^{\,2}\right)^2}}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{C^2} \cdot \left(N_u^{\,2} - B + 1\right)}{C \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - B + 1\right)^2}}$$

1, 2, 3: $$\frac{N_u \cdot \sqrt{A^4 \cdot C^2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}{A^2 \cdot C \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)^2}}$$

2SMT6R14



$N_1 = 2.34343$
$N_2 = 1.19192$
$N_3 = 1.02020$
$R = 1.69684$

Unit. $AB := 1$ **Given.** $N_1 := 2.34343$ $N_2 := 1.19192$ $N_3 := 1.02020$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{B \cdot N_u^{\,3}}{A \cdot C \cdot \left(A^2 + N_u^{\,2}\right)} = 1.696829$$

$$Num := \frac{B \cdot N_u^{\,3}}{\sqrt{\left(B \cdot N_u^{\,3}\right)^2}}$$

$$Den := \frac{A \cdot C \cdot \left(A^2 + N_u^{\,2}\right)}{\sqrt{\left[A \cdot C \cdot \left(A^2 + N_u^{\,2}\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u^{\,3} \cdot \sqrt{A^2 \cdot C^2 \cdot \left(A^2 + N_u^{\,2}\right)^2}}{A \cdot C \cdot \sqrt{B^2 \cdot N_u^{\,6}} \cdot \left(A^2 + N_u^{\,2}\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u^{\,3}\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}{\sqrt{N_u^{\,6}}\cdot\left(N_u^{\,2}+1\right)}$$

0, 0, 3: $$\frac{N_u^{\,3}\cdot\sqrt{C^2\cdot\left(N_u^{\,2}+1\right)^2}}{C\cdot\sqrt{N_u^{\,6}}\cdot\left(N_u^{\,2}+1\right)}$$

1, 0, 0: $$\frac{N_u^{\,3}\cdot\sqrt{A^2\cdot\left(A^2+N_u^{\,2}\right)^2}}{A\cdot\sqrt{N_u^{\,6}}\cdot\left(A^2+N_u^{\,2}\right)}$$

1, 0, 3: $$\frac{N_u^{\,3}\cdot\sqrt{A^2\cdot C^2\cdot\left(A^2+N_u^{\,2}\right)^2}}{A\cdot C\cdot\sqrt{N_u^{\,6}}\cdot\left(A^2+N_u^{\,2}\right)}$$

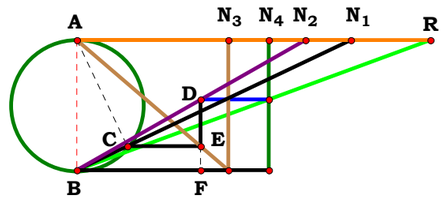
0, 2, 0: $$\frac{B\cdot N_u^{\,3}\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}{\sqrt{B^2\cdot N_u^{\,6}}\cdot\left(N_u^{\,2}+1\right)}$$

0, 2, 3: $$\frac{B\cdot N_u^{\,3}\cdot\sqrt{C^2\cdot\left(N_u^{\,2}+1\right)^2}}{C\cdot\sqrt{B^2\cdot N_u^{\,6}}\cdot\left(N_u^{\,2}+1\right)}$$

1, 2, 0: $$\frac{B\cdot N_u^{\,3}\cdot\sqrt{A^2\cdot\left(A^2+N_u^{\,2}\right)^2}}{A\cdot\sqrt{B^2\cdot N_u^{\,6}}\cdot\left(A^2+N_u^{\,2}\right)}$$

1, 2, 3: $$\frac{B\cdot N_u^{\,3}\cdot\sqrt{A^2\cdot C^2\cdot\left(A^2+N_u^{\,2}\right)^2}}{A\cdot C\cdot\sqrt{B^2\cdot N_u^{\,6}}\cdot\left(A^2+N_u^{\,2}\right)}$$

2SMT6R15



$N_1 = 2.09922$
$N_2 = 1.75053$
$N_3 = 1.16443$
$N_4 = 1.47201$
$R = 2.71510$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.75053$ $N_3 := 1.16443$

$N_4 := 1.47201$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{C \cdot \left(A^2 + N_u{}^2\right)}{B \cdot D \cdot N_u} = 2.715097$$

$$Num := \frac{C \cdot \left(A^2 + N_u{}^2\right)}{\sqrt{\left[C \cdot \left(A^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{B \cdot D \cdot N_u}{\sqrt{\left(B \cdot D \cdot N_u\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{B^2 \cdot D^2 \cdot N_u{}^2}}{B \cdot D \cdot N_u \cdot \sqrt{C^2 \cdot \left(A^2 + N_u{}^2\right)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\dfrac{\sqrt{N_u^{\,2}}\cdot\left(N_u^{\,2}+1\right)}{N_u\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}$

0, 0, 0, 4: $\dfrac{\sqrt{D^2\cdot N_u^{\,2}}\cdot\left(N_u^{\,2}+1\right)}{D\cdot N_u\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}$

1, 0, 0, 0: $\dfrac{\sqrt{N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}\right)}{N_u\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}$

1, 0, 0, 4: $\dfrac{\sqrt{D^2\cdot N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}\right)}{D\cdot N_u\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}$

0, 2, 0, 0: $\dfrac{\sqrt{B^2\cdot N_u^{\,2}}\cdot\left(N_u^{\,2}+1\right)}{B\cdot N_u\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}$

0, 2, 0, 4: $\dfrac{\left(N_u^{\,2}+1\right)\cdot\sqrt{B^2\cdot D^2\cdot N_u^{\,2}}}{B\cdot D\cdot N_u\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}$

1, 2, 0, 0: $\dfrac{\sqrt{B^2\cdot N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}\right)}{B\cdot N_u\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}$

1, 2, 0, 4: $\dfrac{\left(A^2+N_u^{\,2}\right)\cdot\sqrt{B^2\cdot D^2\cdot N_u^{\,2}}}{B\cdot D\cdot N_u\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}$

0, 0, 3, 0: $\dfrac{C\cdot\sqrt{N_u^{\,2}}\cdot\left(N_u^{\,2}+1\right)}{N_u\cdot\sqrt{C^2\cdot\left(N_u^{\,2}+1\right)^2}}$

0, 0, 3, 4: $\dfrac{C\cdot\sqrt{D^2\cdot N_u^{\,2}}\cdot\left(N_u^{\,2}+1\right)}{D\cdot N_u\cdot\sqrt{C^2\cdot\left(N_u^{\,2}+1\right)^2}}$

1, 0, 3, 0: $\dfrac{C\cdot\sqrt{N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}\right)}{N_u\cdot\sqrt{C^2\cdot\left(A^2+N_u^{\,2}\right)^2}}$

1, 0, 3, 4: $\dfrac{C\cdot\sqrt{D^2\cdot N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}\right)}{D\cdot N_u\cdot\sqrt{C^2\cdot\left(A^2+N_u^{\,2}\right)^2}}$

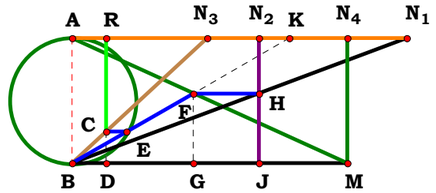
0, 2, 3, 0: $\dfrac{C\cdot\sqrt{B^2\cdot N_u^{\,2}}\cdot\left(N_u^{\,2}+1\right)}{B\cdot N_u\cdot\sqrt{C^2\cdot\left(N_u^{\,2}+1\right)^2}}$

0, 2, 3, 4: $\dfrac{C\cdot\left(N_u^{\,2}+1\right)\cdot\sqrt{B^2\cdot D^2\cdot N_u^{\,2}}}{B\cdot D\cdot N_u\cdot\sqrt{C^2\cdot\left(N_u^{\,2}+1\right)^2}}$

1, 2, 3, 0: $\dfrac{C\cdot\sqrt{B^2\cdot N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}\right)}{B\cdot N_u\cdot\sqrt{C^2\cdot\left(A^2+N_u^{\,2}\right)^2}}$

1, 2, 3, 4: $\dfrac{C\cdot\left(A^2+N_u^{\,2}\right)\cdot\sqrt{B^2\cdot D^2\cdot N_u^{\,2}}}{B\cdot D\cdot N_u\cdot\sqrt{C^2\cdot\left(A^2+N_u^{\,2}\right)^2}}$

2SMT7R0



$N_1 = 2.67677$
$N_2 = 1.49495$
$N_3 = 1.08081$
$N_4 = 2.20202$
$R = 0.26817$

Unit. $AB := 1$ Given. $N_1 := 2.67677$ $N_2 := 1.49495$ $N_3 := 1.08081$

$N_4 := 2.20202$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A^2 \cdot D^2 \cdot N_u}{A^2 \cdot C \cdot D^2 + C \cdot {N_u}^2 \cdot (A - B)^2} = 0.268168$$

$$Num := \frac{A^2 \cdot D^2 \cdot N_u}{\sqrt{\left(A^2 \cdot D^2 \cdot N_u\right)^2}}$$

$$Den := \frac{A^2 \cdot C \cdot D^2 + C \cdot {N_u}^2 \cdot (A - B)^2}{\sqrt{\left[A^2 \cdot C \cdot D^2 + C \cdot {N_u}^2 \cdot (A - B)^2\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^2 \cdot D^2 \cdot N_u \cdot \sqrt{\left[A^2 \cdot C \cdot D^2 + C \cdot {N_u}^2 \cdot (A - B)^2\right]^2}}{C \cdot \left(A^2 \cdot D^2 + A^2 \cdot {N_u}^2 - 2 \cdot A \cdot B \cdot {N_u}^2 + B^2 \cdot {N_u}^2\right) \cdot \sqrt{A^4 \cdot D^4 \cdot {N_u}^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:

$$\frac{N_u}{\sqrt{N_u^{\,2}}}$$

1, 0, 0, 0:

$$\frac{A^2 \cdot N_u \cdot \sqrt{\left[A^2 + N_u^{\,2} \cdot (A-1)^2\right]^2}}{\sqrt{A^4 \cdot N_u^{\,2}} \cdot \left(A^2 \cdot N_u^{\,2} + A^2 - 2 \cdot A \cdot N_u^{\,2} + N_u^{\,2}\right)}$$

0, 2, 0, 0:

$$\frac{N_u \cdot \sqrt{\left[N_u^{\,2} \cdot (B-1)^2 + 1\right]^2}}{\sqrt{N_u^{\,2}} \cdot \left(B^2 \cdot N_u^{\,2} - 2 \cdot B \cdot N_u^{\,2} + N_u^{\,2} + 1\right)}$$

1, 2, 0, 0:

$$\frac{A^2 \cdot N_u \cdot \sqrt{\left[A^2 + N_u^{\,2} \cdot (A-B)^2\right]^2}}{\sqrt{A^4 \cdot N_u^{\,2}} \cdot \left(A^2 \cdot N_u^{\,2} + A^2 - 2 \cdot A \cdot B \cdot N_u^{\,2} + B^2 \cdot N_u^{\,2}\right)}$$

0, 0, 3, 0:

$$\frac{N_u \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^{\,2}}}$$

1, 0, 3, 0:

$$\frac{A^2 \cdot N_u \cdot \sqrt{\left[A^2 \cdot C + C \cdot N_u^{\,2} \cdot (A-1)^2\right]^2}}{C \cdot \sqrt{A^4 \cdot N_u^{\,2}} \cdot \left(A^2 \cdot N_u^{\,2} + A^2 - 2 \cdot A \cdot N_u^{\,2} + N_u^{\,2}\right)}$$

0, 2, 3, 0:

$$\frac{N_u \cdot \sqrt{\left[C + C \cdot N_u^{\,2} \cdot (B-1)^2\right]^2}}{C \cdot \sqrt{N_u^{\,2}} \cdot \left(B^2 \cdot N_u^{\,2} - 2 \cdot B \cdot N_u^{\,2} + N_u^{\,2} + 1\right)}$$

1, 2, 3, 0:

$$\frac{A^2 \cdot N_u \cdot \sqrt{\left[A^2 \cdot C + C \cdot N_u^{\,2} \cdot (A-B)^2\right]^2}}{C \cdot \sqrt{A^4 \cdot N_u^{\,2}} \cdot \left(A^2 \cdot N_u^{\,2} + A^2 - 2 \cdot A \cdot B \cdot N_u^{\,2} + B^2 \cdot N_u^{\,2}\right)}$$

0, 0, 0, 4:

$$\frac{N_u \cdot \sqrt{D^4}}{\sqrt{D^4 \cdot N_u^{\,2}}}$$

1, 0, 0, 4:

$$\frac{A^2 \cdot D^2 \cdot N_u \cdot \sqrt{\left[A^2 \cdot D^2 + N_u^{\,2} \cdot (A-1)^2\right]^2}}{\sqrt{A^4 \cdot D^4 \cdot N_u^{\,2}} \cdot \left(A^2 \cdot D^2 + A^2 \cdot N_u^{\,2} - 2 \cdot A \cdot N_u^{\,2} + N_u^{\,2}\right)}$$

0, 2, 0, 4:

$$\frac{D^2 \cdot N_u \cdot \sqrt{\left[D^2 + N_u^{\,2} \cdot (B-1)^2\right]^2}}{\sqrt{D^4 \cdot N_u^{\,2}} \cdot \left(B^2 \cdot N_u^{\,2} - 2 \cdot B \cdot N_u^{\,2} + D^2 + N_u^{\,2}\right)}$$

1, 2, 0, 4:

$$\frac{A^2 \cdot D^2 \cdot N_u \cdot \sqrt{\left[A^2 \cdot D^2 + N_u^{\,2} \cdot (A-B)^2\right]^2}}{\sqrt{A^4 \cdot D^4 \cdot N_u^{\,2}} \cdot \left(A^2 \cdot D^2 + A^2 \cdot N_u^{\,2} - 2 \cdot A \cdot B \cdot N_u^{\,2} + B^2 \cdot N_u^{\,2}\right)}$$

0, 0, 3, 4:

$$\frac{N_u \cdot \sqrt{C^2 \cdot D^4}}{C \cdot \sqrt{D^4 \cdot N_u^{\,2}}}$$

1, 0, 3, 4:

$$\frac{A^2 \cdot D^2 \cdot N_u \cdot \sqrt{\left[C \cdot N_u^{\,2} \cdot (A-1)^2 + A^2 \cdot C \cdot D^2\right]^2}}{C \cdot \sqrt{A^4 \cdot D^4 \cdot N_u^{\,2}} \cdot \left(A^2 \cdot D^2 + A^2 \cdot N_u^{\,2} - 2 \cdot A \cdot N_u^{\,2} + N_u^{\,2}\right)}$$

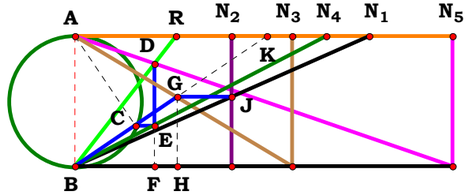
0, 2, 3, 4:

$$\frac{D^2 \cdot N_u \cdot \sqrt{\left[C \cdot D^2 + C \cdot N_u^{\,2} \cdot (B-1)^2\right]^2}}{C \cdot \sqrt{D^4 \cdot N_u^{\,2}} \cdot \left(B^2 \cdot N_u^{\,2} - 2 \cdot B \cdot N_u^{\,2} + D^2 + N_u^{\,2}\right)}$$

1, 2, 3, 4:

$$\frac{A^2 \cdot D^2 \cdot N_u \cdot \sqrt{\left[A^2 \cdot C \cdot D^2 + C \cdot N_u^{\,2} \cdot (A-B)^2\right]^2}}{C \cdot \left(A^2 \cdot D^2 + A^2 \cdot N_u^{\,2} - 2 \cdot A \cdot B \cdot N_u^{\,2} + B^2 \cdot N_u^{\,2}\right) \cdot \sqrt{A^4 \cdot D^4 \cdot N_u^{\,2}}}$$

2SMT7R1



$N_1 = 2.25419$
$N_2 = 1.19844$
$N_3 = 1.66809$
$N_4 = 1.92724$
$N_5 = 2.89197$
$R = 0.77308$

Unit. $AB := 1$ Given. $N_1 := 2.25419$ $N_2 := 1.19844$ $N_3 := 1.66809$

$N_4 := 1.92724$ $N_5 := 2.89197$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A^2 \cdot C^2 \cdot N_u}{N_u^2 \cdot D \cdot (A-B)^2 + A^2 \cdot C^2 \cdot (D-E)} = 0.773071$$

$$Num := \frac{A^2 \cdot C^2 \cdot N_u}{\sqrt{\left(A^2 \cdot C^2 \cdot N_u\right)^2}}$$

$$Den := \frac{N_u^2 \cdot D \cdot (A-B)^2 + A^2 \cdot C^2 \cdot (D-E)}{\sqrt{\left[N_u^2 \cdot D \cdot (A-B)^2 + A^2 \cdot C^2 \cdot (D-E)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^2 \cdot C^2 \cdot N_u \cdot \sqrt{\left[A^2 \cdot C^2 \cdot (D-E) + D \cdot N_u^2 \cdot (A-B)^2\right]^2}}{\left[A^2 \cdot C^2 \cdot (D-E) + D \cdot N_u^2 \cdot (A-B)^2\right] \cdot \sqrt{A^4 \cdot C^4 \cdot N_u^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: 0

1, 0, 0, 0, 0: $$\frac{A^2\cdot\sqrt{N_u{}^4\cdot(A-1)^4}}{N_u\cdot(A-1)^2\cdot\sqrt{A^4\cdot N_u{}^2}}$$

0, 2, 0, 0, 0: $$\frac{\sqrt{N_u{}^4\cdot(B-1)^4}}{N_u\cdot(B-1)^2\cdot\sqrt{N_u{}^2}}$$

1, 2, 0, 0, 0: $$\frac{A^2\cdot\sqrt{N_u{}^4\cdot(A-B)^4}}{N_u\cdot\sqrt{A^4\cdot N_u{}^2}\cdot(A-B)^2}$$

0, 0, 3, 0, 0: 0

1, 0, 3, 0, 0: $$\frac{A^2\cdot C^2\cdot\sqrt{N_u{}^4\cdot(A-1)^4}}{N_u\cdot(A-1)^2\cdot\sqrt{A^4\cdot C^4\cdot N_u{}^2}}$$

0, 2, 3, 0, 0: $$\frac{C^2\cdot\sqrt{N_u{}^4\cdot(B-1)^4}}{N_u\cdot(B-1)^2\cdot\sqrt{C^4\cdot N_u{}^2}}$$

1, 2, 3, 0, 0: $$\frac{A^2\cdot C^2\cdot\sqrt{N_u{}^4\cdot(A-B)^4}}{N_u\cdot(A-B)^2\cdot\sqrt{A^4\cdot C^4\cdot N_u{}^2}}$$

0, 0, 0, 4, 0: $$\frac{N_u\cdot\sqrt{(D-1)^2}}{(D-1)\cdot\sqrt{N_u{}^2}}$$

1, 0, 0, 4, 0: $$\frac{A^2\cdot N_u\cdot\sqrt{\left[A^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-1)^2\right]^2}}{\sqrt{A^4\cdot N_u{}^2}\cdot\left[A^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-1)^2\right]}$$

0, 2, 0, 4, 0: $$\frac{N_u\cdot\sqrt{\left[D+D\cdot N_u{}^2\cdot(B-1)^2-1\right]^2}}{\sqrt{N_u{}^2}\cdot\left[D+D\cdot N_u{}^2\cdot(B-1)^2-1\right]}$$

1, 2, 0, 4, 0: $$\frac{A^2\cdot N_u\cdot\sqrt{\left[A^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-B)^2\right]^2}}{\left[A^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-B)^2\right]\cdot\sqrt{A^4\cdot N_u{}^2}}$$

0, 0, 3, 4, 0: $$\frac{N_u\cdot\sqrt{C^4\cdot(D-1)^2}}{(D-1)\cdot\sqrt{C^4\cdot N_u{}^2}}$$

1, 0, 3, 4, 0: $$\frac{A^2\cdot C^2\cdot N_u\cdot\sqrt{\left[A^2\cdot C^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-1)^2\right]^2}}{\left[A^2\cdot C^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-1)^2\right]\cdot\sqrt{A^4\cdot C^4\cdot N_u{}^2}}$$

0, 2, 3, 4, 0: $$\frac{C^2\cdot N_u\cdot\sqrt{\left[C^2\cdot(D-1)+D\cdot N_u{}^2\cdot(B-1)^2\right]^2}}{\sqrt{C^4\cdot N_u{}^2}\cdot\left[C^2\cdot(D-1)+D\cdot N_u{}^2\cdot(B-1)^2\right]}$$

1, 2, 3, 4, 0: $$\frac{A^2\cdot C^2\cdot N_u\cdot\sqrt{\left[A^2\cdot C^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-B)^2\right]^2}}{\left[A^2\cdot C^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-B)^2\right]\cdot\sqrt{A^4\cdot C^4\cdot N_u{}^2}}$$

0, 0, 0, 0, 5: $$-\frac{N_u \cdot \sqrt{(E-1)^2}}{(E-1) \cdot \sqrt{N_u^2}}$$

1, 0, 0, 0, 5: $$-\frac{A^2 \cdot N_u \cdot \sqrt{\left[A^2 \cdot (E-1) - N_u^2 \cdot (A-1)^2\right]^2}}{\left[A^2 \cdot (E-1) - N_u^2 \cdot (A-1)^2\right] \cdot \sqrt{A^4 \cdot N_u^2}}$$

0, 2, 0, 0, 5: $$\frac{N_u \cdot \sqrt{\left[N_u^2 \cdot (B-1)^2 - E + 1\right]^2}}{\sqrt{N_u^2} \cdot \left[N_u^2 \cdot (B-1)^2 - E + 1\right]}$$

1, 2, 0, 0, 5: $$-\frac{A^2 \cdot N_u \cdot \sqrt{\left[A^2 \cdot (E-1) - N_u^2 \cdot (A-B)^2\right]^2}}{\sqrt{A^4 \cdot N_u^2} \cdot \left[A^2 \cdot (E-1) - N_u^2 \cdot (A-B)^2\right]}$$

0, 0, 3, 0, 5: $$-\frac{N_u \cdot \sqrt{C^4 \cdot (E-1)^2}}{(E-1) \cdot \sqrt{C^4 \cdot N_u^2}}$$

1, 0, 3, 0, 5: $$\frac{A^2 \cdot C^2 \cdot N_u \cdot \sqrt{\left[N_u^2 \cdot (A-1)^2 - A^2 \cdot C^2 \cdot (E-1)\right]^2}}{\left[N_u^2 \cdot (A-1)^2 - A^2 \cdot C^2 \cdot (E-1)\right] \cdot \sqrt{A^4 \cdot C^4 \cdot N_u^2}}$$

0, 2, 3, 0, 5: $$-\frac{C^2 \cdot N_u \cdot \sqrt{\left[C^2 \cdot (E-1) - N_u^2 \cdot (B-1)^2\right]^2}}{\left[C^2 \cdot (E-1) - N_u^2 \cdot (B-1)^2\right] \cdot \sqrt{C^4 \cdot N_u^2}}$$

1, 2, 3, 0, 5: $$\frac{A^2 \cdot C^2 \cdot N_u \cdot \sqrt{\left[N_u^2 \cdot (A-B)^2 - A^2 \cdot C^2 \cdot (E-1)\right]^2}}{\left[N_u^2 \cdot (A-B)^2 - A^2 \cdot C^2 \cdot (E-1)\right] \cdot \sqrt{A^4 \cdot C^4 \cdot N_u^2}}$$

0, 0, 0, 4, 5: $$\frac{N_u \cdot \sqrt{(D-E)^2}}{\sqrt{N_u^2} \cdot (D-E)}$$

1, 0, 0, 4, 5: $$\frac{A^2 \cdot N_u \cdot \sqrt{\left[A^2 \cdot (D-E) + D \cdot N_u^2 \cdot (A-1)^2\right]^2}}{\left[A^2 \cdot (D-E) + D \cdot N_u^2 \cdot (A-1)^2\right] \cdot \sqrt{A^4 \cdot N_u^2}}$$

0, 2, 0, 4, 5: $$\frac{N_u \cdot \sqrt{\left[D - E + D \cdot N_u^2 \cdot (B-1)^2\right]^2}}{\sqrt{N_u^2} \cdot \left[D - E + D \cdot N_u^2 \cdot (B-1)^2\right]}$$

1, 2, 0, 4, 5: $$\frac{A^2 \cdot N_u \cdot \sqrt{\left[A^2 \cdot (D-E) + D \cdot N_u^2 \cdot (A-B)^2\right]^2}}{\sqrt{A^4 \cdot N_u^2} \cdot \left[A^2 \cdot (D-E) + D \cdot N_u^2 \cdot (A-B)^2\right]}$$

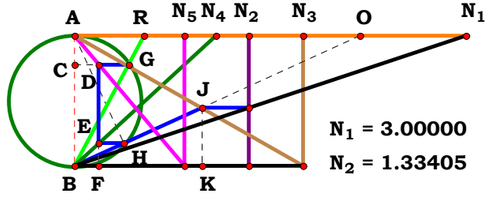
0, 0, 3, 4, 5: $$\frac{N_u \cdot \sqrt{C^4 \cdot (D-E)^2}}{\sqrt{C^4 \cdot N_u^2} \cdot (D-E)}$$

1, 0, 3, 4, 5: $$\frac{A^2 \cdot C^2 \cdot N_u \cdot \sqrt{\left[D \cdot N_u^2 \cdot (A-1)^2 + A^2 \cdot C^2 \cdot (D-E)\right]^2}}{\left[D \cdot N_u^2 \cdot (A-1)^2 + A^2 \cdot C^2 \cdot (D-E)\right] \cdot \sqrt{A^4 \cdot C^4 \cdot N_u^2}}$$

0, 2, 3, 4, 5: $$\frac{C^2 \cdot N_u \cdot \sqrt{\left[C^2 \cdot (D-E) + D \cdot N_u^2 \cdot (B-1)^2\right]^2}}{\left[C^2 \cdot (D-E) + D \cdot N_u^2 \cdot (B-1)^2\right] \cdot \sqrt{C^4 \cdot N_u^2}}$$

1, 2, 3, 4, 5: $$\frac{A^2 \cdot C^2 \cdot N_u \cdot \sqrt{\left[A^2 \cdot C^2 \cdot (D-E) + D \cdot N_u^2 \cdot (A-B)^2\right]^2}}{\left[A^2 \cdot C^2 \cdot (D-E) + D \cdot N_u^2 \cdot (A-B)^2\right] \cdot \sqrt{A^4 \cdot C^4 \cdot N_u^2}}$$

2SMT7R2



Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 1.33405$ $N_3 := 1.75526$

$N_4 := 1.08458$ $N_5 := .83858$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot C \cdot \sqrt{E} \cdot N_u^{3} \cdot \sqrt{N_u^{2} \cdot D \cdot (A-B)^2 + A^2 \cdot C^2 \cdot (D-E)}}{A^2 \cdot N_u^{3} \cdot \left[C^2 \cdot (D-E) + D \cdot N_u^{2}\right] - B \cdot D \cdot N_u^{5} \cdot (2 \cdot A - B)} = 0.535436$$

$$Num := \frac{A \cdot C \cdot \sqrt{E} \cdot N_u^{3} \cdot \sqrt{N_u^{2} \cdot D \cdot (A-B)^2 + A^2 \cdot C^2 \cdot (D-E)}}{\sqrt{\left[A \cdot C \cdot \sqrt{E} \cdot N_u^{3} \cdot \sqrt{N_u^{2} \cdot D \cdot (A-B)^2 + A^2 \cdot C^2 \cdot (D-E)}\right]^2}}$$

$$Den := \frac{A^2 \cdot N_u^{3} \cdot \left[C^2 \cdot (D-E) + D \cdot N_u^{2}\right] - B \cdot D \cdot N_u^{5} \cdot (2 \cdot A - B)}{\sqrt{\left[A^2 \cdot N_u^{3} \cdot \left[C^2 \cdot (D-E) + D \cdot N_u^{2}\right] - B \cdot D \cdot N_u^{5} \cdot (2 \cdot A - B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot C \cdot \sqrt{E} \cdot \sqrt{A^2 \cdot C^2 \cdot (D-E) + D \cdot N_u^{2} \cdot (A-B)^2} \cdot \sqrt{\left[A^2 \cdot N_u^{3} \cdot \left[(D-E) \cdot C^2 + D \cdot N_u^{2}\right] + B \cdot D \cdot N_u^{5} \cdot (B - 2 \cdot A)\right]^2}}{\left(A^2 \cdot C^2 \cdot D - A^2 \cdot C^2 \cdot E + A^2 \cdot D \cdot N_u^{2} + B^2 \cdot D \cdot N_u^{2} - 2 \cdot A \cdot B \cdot D \cdot N_u^{2}\right) \cdot \sqrt{A^2 \cdot C^2 \cdot E \cdot N_u^{6} \cdot \left[A^2 \cdot C^2 \cdot (D-E) + D \cdot N_u^{2} \cdot (A-B)^2\right]}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0: 0

1, 0, 0, 0, 0:
$$\frac{A\cdot\sqrt{\left[A^2\cdot {N_u}^5+B\cdot {N_u}^5\cdot(B-2\cdot A)\right]^2}\cdot\sqrt{{N_u}^2\cdot(A-B)^2}}{\sqrt{A^2\cdot {N_u}^8\cdot(A-B)^2}\cdot\left(A^2\cdot {N_u}^2-2\cdot A\cdot B\cdot {N_u}^2+B^2\cdot {N_u}^2\right)}$$

0, 2, 0, 0, 0:
$$\frac{\sqrt{\left[{N_u}^5+B\cdot {N_u}^5\cdot(B-2)\right]^2}\cdot\sqrt{{N_u}^2\cdot(B-1)^2}}{\sqrt{{N_u}^8\cdot(B-1)^2}\cdot\left(B^2\cdot {N_u}^2-2\cdot B\cdot {N_u}^2+{N_u}^2\right)}$$

1, 2, 0, 0, 0:
$$\frac{A\cdot\sqrt{\left[A^2\cdot {N_u}^5+B\cdot {N_u}^5\cdot(B-2\cdot A)\right]^2}\cdot\sqrt{{N_u}^2\cdot(A-B)^2}}{\sqrt{A^2\cdot {N_u}^8\cdot(A-B)^2}\cdot\left(A^2\cdot {N_u}^2-2\cdot A\cdot B\cdot {N_u}^2+B^2\cdot {N_u}^2\right)}$$

0, 0, 3, 0, 0: 0

1, 0, 3, 0, 0:
$$\frac{A\cdot C\cdot\sqrt{\left[A^2\cdot {N_u}^5-{N_u}^5\cdot(2\cdot A-1)\right]^2}\cdot\sqrt{{N_u}^2\cdot(A-1)^2}}{\left(A^2\cdot {N_u}^2-2\cdot A\cdot {N_u}^2+{N_u}^2\right)\cdot\sqrt{A^2\cdot C^2\cdot {N_u}^8\cdot(A-1)^2}}$$

0, 2, 3, 0, 0:
$$\frac{C\cdot\sqrt{\left[{N_u}^5+B\cdot {N_u}^5\cdot(B-2)\right]^2}\cdot\sqrt{{N_u}^2\cdot(B-1)^2}}{\left(B^2\cdot {N_u}^2-2\cdot B\cdot {N_u}^2+{N_u}^2\right)\cdot\sqrt{C^2\cdot {N_u}^8\cdot(B-1)^2}}$$

1, 2, 3, 0, 0:
$$\frac{A\cdot C\cdot\sqrt{\left[A^2\cdot {N_u}^5+B\cdot {N_u}^5\cdot(B-2\cdot A)\right]^2}\cdot\sqrt{{N_u}^2\cdot(A-B)^2}}{\left(A^2\cdot {N_u}^2-2\cdot A\cdot B\cdot {N_u}^2+B^2\cdot {N_u}^2\right)\cdot\sqrt{A^2\cdot C^2\cdot {N_u}^8\cdot(A-B)^2}}$$

0, 0, 0, 4, 0:

$$\frac{\sqrt{\left[N_u^{\,3}\cdot\left(D\cdot N_u^{\,2}+D-1\right)-D\cdot N_u^{\,5}\right]^2}}{\sqrt{D-1}\cdot\sqrt{N_u^{\,6}\cdot(D-1)}}$$

1, 0, 0, 4, 0:

$$\frac{A\cdot\sqrt{\left[D\cdot N_u^{\,5}\cdot(2\cdot A-1)-A^2\cdot N_u^{\,3}\cdot\left(D\cdot N_u^{\,2}+D-1\right)\right]^2}\cdot\sqrt{A^2\cdot(D-1)+D\cdot N_u^{\,2}\cdot(A-1)^2}}{\sqrt{A^2\cdot N_u^{\,6}\cdot\left[A^2\cdot(D-1)+D\cdot N_u^{\,2}\cdot(A-1)^2\right]}\cdot\left(A^2\cdot D-A^2+D\cdot N_u^{\,2}-2\cdot A\cdot D\cdot N_u^{\,2}+A^2\cdot D\cdot N_u^{\,2}\right)}$$

0, 2, 0, 4, 0:

$$\frac{\sqrt{\left[N_u^{\,3}\cdot\left(D\cdot N_u^{\,2}+D-1\right)+B\cdot D\cdot N_u^{\,5}\cdot(B-2)\right]^2}\cdot\sqrt{D+D\cdot N_u^{\,2}\cdot(B-1)^2-1}}{\sqrt{N_u^{\,6}\cdot\left[D+D\cdot N_u^{\,2}\cdot(B-1)^2-1\right]}\cdot\left(D\cdot B^2\cdot N_u^{\,2}-2\cdot D\cdot B\cdot N_u^{\,2}+D\cdot N_u^{\,2}+D-1\right)}$$

1, 2, 0, 4, 0:

$$\frac{A\cdot\sqrt{A^2\cdot(D-1)+D\cdot N_u^{\,2}\cdot(A-B)^2}\cdot\sqrt{\left[A^2\cdot N_u^{\,3}\cdot\left(D\cdot N_u^{\,2}+D-1\right)+B\cdot D\cdot N_u^{\,5}\cdot(B-2\cdot A)\right]^2}}{\sqrt{A^2\cdot N_u^{\,6}\cdot\left[A^2\cdot(D-1)+D\cdot N_u^{\,2}\cdot(A-B)^2\right]}\cdot\left(A^2\cdot D-A^2+A^2\cdot D\cdot N_u^{\,2}+B^2\cdot D\cdot N_u^{\,2}-2\cdot A\cdot B\cdot D\cdot N_u^{\,2}\right)}$$

0, 0, 3, 4, 0:

$$-\frac{C\cdot\sqrt{C^2\cdot(D-1)}\cdot\sqrt{\left[N_u^{\,3}\cdot\left[(D-1)\cdot C^2+D\cdot N_u^{\,2}\right]-D\cdot N_u^{\,5}\right]^2}}{\left(C^2-C^2\cdot D\right)\cdot\sqrt{C^4\cdot N_u^{\,6}\cdot(D-1)}}$$

1, 0, 3, 4, 0:

$$\frac{A\cdot C\cdot\sqrt{A^2\cdot C^2\cdot(D-1)+D\cdot N_u^{\,2}\cdot(A-1)^2}\cdot\sqrt{\left[D\cdot N_u^{\,5}\cdot(2\cdot A-1)-A^2\cdot N_u^{\,3}\cdot\left[(D-1)\cdot C^2+D\cdot N_u^{\,2}\right]\right]^2}}{\sqrt{A^2\cdot C^2\cdot N_u^{\,6}\cdot\left[A^2\cdot C^2\cdot(D-1)+D\cdot N_u^{\,2}\cdot(A-1)^2\right]}\cdot\left(D\cdot N_u^{\,2}-A^2\cdot C^2-2\cdot A\cdot D\cdot N_u^{\,2}+A^2\cdot C^2\cdot D+A^2\cdot D\cdot N_u^{\,2}\right)}$$

0, 2, 3, 4, 0:

$$\frac{C\cdot\sqrt{C^2\cdot(D-1)+D\cdot N_u^{\,2}\cdot(B-1)^2}\cdot\sqrt{\left[N_u^{\,3}\cdot\left[(D-1)\cdot C^2+D\cdot N_u^{\,2}\right]+B\cdot D\cdot N_u^{\,5}\cdot(B-2)\right]^2}}{\sqrt{C^2\cdot N_u^{\,6}\cdot\left[C^2\cdot(D-1)+D\cdot N_u^{\,2}\cdot(B-1)^2\right]}\cdot\left(C^2\cdot D-C^2+D\cdot N_u^{\,2}-2\cdot B\cdot D\cdot N_u^{\,2}+B^2\cdot D\cdot N_u^{\,2}\right)}$$

1, 2, 3, 4, 0:

$$\frac{A\cdot C\cdot\sqrt{\left[A^2\cdot N_u^{\,3}\cdot\left[(D-1)\cdot C^2+D\cdot N_u^{\,2}\right]+B\cdot D\cdot N_u^{\,5}\cdot(B-2\cdot A)\right]^2}\cdot\sqrt{A^2\cdot C^2\cdot(D-1)+D\cdot N_u^{\,2}\cdot(A-B)^2}}{\sqrt{A^2\cdot C^2\cdot N_u^{\,6}\cdot\left[A^2\cdot C^2\cdot(D-1)+D\cdot N_u^{\,2}\cdot(A-B)^2\right]}\cdot\left(A^2\cdot C^2\cdot D-A^2\cdot C^2+A^2\cdot D\cdot N_u^{\,2}+B^2\cdot D\cdot N_u^{\,2}-2\cdot A\cdot B\cdot D\cdot N_u^{\,2}\right)}$$

0, 0, 0, 0, 5:

$$\frac{\sqrt{E}\cdot\sqrt{\left[{N_u}^5-{N_u}^3\cdot\left({N_u}^2-E+1\right)\right]^2}}{\sqrt{1-E}\cdot\sqrt{-E\cdot{N_u}^6\cdot(E-1)}}$$

1, 0, 0, 0, 5:

$$\frac{A\cdot\sqrt{E}\cdot\sqrt{{N_u}^2\cdot(A-1)^2-A^2\cdot(E-1)}\cdot\sqrt{\left[{N_u}^5\cdot(2\cdot A-1)-A^2\cdot{N_u}^3\cdot\left({N_u}^2-E+1\right)\right]^2}}{\sqrt{-A^2\cdot E\cdot{N_u}^6\cdot\left[A^2\cdot(E-1)-{N_u}^2\cdot(A-1)^2\right]}\cdot\left(A^2+{N_u}^2+A^2\cdot{N_u}^2-A^2\cdot E-2\cdot A\cdot{N_u}^2\right)}$$

0, 2, 0, 0, 5:

$$\frac{\sqrt{E}\cdot\sqrt{\left[{N_u}^3\cdot\left({N_u}^2-E+1\right)+B\cdot{N_u}^5\cdot(B-2)\right]^2}\cdot\sqrt{{N_u}^2\cdot(B-1)^2-E+1}}{\sqrt{E\cdot{N_u}^6\cdot\left[{N_u}^2\cdot(B-1)^2-E+1\right]}\cdot\left(B^2\cdot{N_u}^2-2\cdot B\cdot{N_u}^2+{N_u}^2-E+1\right)}$$

1, 2, 0, 0, 5:

$$\frac{A\cdot\sqrt{E}\cdot\sqrt{\left[A^2\cdot{N_u}^3\cdot\left({N_u}^2-E+1\right)+B\cdot{N_u}^5\cdot(B-2\cdot A)\right]^2}\cdot\sqrt{{N_u}^2\cdot(A-B)^2-A^2\cdot(E-1)}}{\sqrt{-A^2\cdot E\cdot{N_u}^6\cdot\left[A^2\cdot(E-1)-{N_u}^2\cdot(A-B)^2\right]}\cdot\left(A^2+A^2\cdot{N_u}^2+B^2\cdot{N_u}^2-A^2\cdot E-2\cdot A\cdot B\cdot{N_u}^2\right)}$$

0, 0, 3, 0, 5:

$$\frac{C\cdot\sqrt{E}\cdot\sqrt{-C^2\cdot(E-1)}\cdot\sqrt{\left[{N_u}^5-{N_u}^3\cdot\left[{N_u}^2-C^2\cdot(E-1)\right]\right]^2}}{\left(C^2-C^2\cdot E\right)\cdot\sqrt{-C^4\cdot E\cdot{N_u}^6\cdot(E-1)}}$$

1, 0, 3, 0, 5:

$$\frac{A\cdot C\cdot\sqrt{E}\cdot\sqrt{\left[{N_u}^5\cdot(2\cdot A-1)-A^2\cdot{N_u}^3\cdot\left[{N_u}^2-C^2\cdot(E-1)\right]\right]^2}\cdot\sqrt{{N_u}^2\cdot(A-1)^2-A^2\cdot C^2\cdot(E-1)}}{\left({N_u}^2+A^2\cdot C^2+A^2\cdot{N_u}^2-2\cdot A\cdot{N_u}^2-A^2\cdot C^2\cdot E\right)\cdot\sqrt{A^2\cdot C^2\cdot E\cdot{N_u}^6\cdot\left[{N_u}^2\cdot(A-1)^2-A^2\cdot C^2\cdot(E-1)\right]}}$$

0, 2, 3, 0, 5:

$$\frac{C\cdot\sqrt{E}\cdot\sqrt{{N_u}^2\cdot(B-1)^2-C^2\cdot(E-1)}\cdot\sqrt{\left[{N_u}^3\cdot\left[{N_u}^2-C^2\cdot(E-1)\right]+B\cdot{N_u}^5\cdot(B-2)\right]^2}}{\sqrt{-C^2\cdot E\cdot{N_u}^6\cdot\left[C^2\cdot(E-1)-{N_u}^2\cdot(B-1)^2\right]}\cdot\left(C^2+{N_u}^2+B^2\cdot{N_u}^2-C^2\cdot E-2\cdot B\cdot{N_u}^2\right)}$$

1, 2, 3, 0, 5:

$$\frac{A\cdot C\cdot\sqrt{E}\cdot\sqrt{\left[B\cdot{N_u}^5\cdot(B-2\cdot A)+A^2\cdot{N_u}^3\cdot\left[{N_u}^2-C^2\cdot(E-1)\right]\right]^2}\cdot\sqrt{{N_u}^2\cdot(A-B)^2-A^2\cdot C^2\cdot(E-1)}}{\left(A^2\cdot C^2+A^2\cdot{N_u}^2+B^2\cdot{N_u}^2-2\cdot A\cdot B\cdot{N_u}^2-A^2\cdot C^2\cdot E\right)\cdot\sqrt{A^2\cdot C^2\cdot E\cdot{N_u}^6\cdot\left[{N_u}^2\cdot(A-B)^2-A^2\cdot C^2\cdot(E-1)\right]}}$$

0, 0, 0, 4, 5:

$$\frac{\sqrt{E}\cdot\sqrt{\left[N_u{}^3\cdot\left(D\cdot N_u{}^2+D-E\right)-D\cdot N_u{}^5\right]^2}}{\sqrt{D-E}\cdot\sqrt{E\cdot N_u{}^6\cdot(D-E)}}$$

1, 0, 0, 4, 5:

$$\frac{A\cdot\sqrt{E}\cdot\sqrt{A^2\cdot(D-E)+D\cdot N_u{}^2\cdot(A-1)^2}\cdot\sqrt{\left[D\cdot N_u{}^5\cdot(2\cdot A-1)-A^2\cdot N_u{}^3\cdot\left(D\cdot N_u{}^2+D-E\right)\right]^2}}{\sqrt{A^2\cdot E\cdot N_u{}^6\cdot\left[A^2\cdot(D-E)+D\cdot N_u{}^2\cdot(A-1)^2\right]}\cdot\left(A^2\cdot D-A^2\cdot E+D\cdot N_u{}^2-2\cdot A\cdot D\cdot N_u{}^2+A^2\cdot D\cdot N_u{}^2\right)}$$

0, 2, 0, 4, 5:

$$\frac{\sqrt{E}\cdot\sqrt{\left[N_u{}^3\cdot\left(D\cdot N_u{}^2+D-E\right)+B\cdot D\cdot N_u{}^5\cdot(B-2)\right]^2}\cdot\sqrt{D-E+D\cdot N_u{}^2\cdot(B-1)^2}}{\sqrt{E\cdot N_u{}^6\cdot\left[D-E+D\cdot N_u{}^2\cdot(B-1)^2\right]}\cdot\left(D\cdot B^2\cdot N_u{}^2-2\cdot D\cdot B\cdot N_u{}^2+D\cdot N_u{}^2+D-E\right)}$$

1, 2, 0, 4, 5:

$$\frac{A\cdot\sqrt{E}\cdot\sqrt{\left[A^2\cdot N_u{}^3\cdot\left(D\cdot N_u{}^2+D-E\right)+B\cdot D\cdot N_u{}^5\cdot(B-2\cdot A)\right]^2}\cdot\sqrt{A^2\cdot(D-E)+D\cdot N_u{}^2\cdot(A-B)^2}}{\sqrt{A^2\cdot E\cdot N_u{}^6\cdot\left[A^2\cdot(D-E)+D\cdot N_u{}^2\cdot(A-B)^2\right]}\cdot\left(A^2\cdot D-A^2\cdot E+A^2\cdot D\cdot N_u{}^2+B^2\cdot D\cdot N_u{}^2-2\cdot A\cdot B\cdot D\cdot N_u{}^2\right)}$$

0, 0, 3, 4, 5:

$$\frac{C\cdot\sqrt{E}\cdot\sqrt{C^2\cdot(D-E)}\cdot\sqrt{\left[N_u{}^3\cdot\left[(D-E)\cdot C^2+D\cdot N_u{}^2\right]-D\cdot N_u{}^5\right]^2}}{\left(C^2\cdot D-C^2\cdot E\right)\cdot\sqrt{C^4\cdot E\cdot N_u{}^6\cdot(D-E)}}$$

1, 0, 3, 4, 5:

$$\frac{A\cdot C\cdot\sqrt{E}\cdot\sqrt{\left[D\cdot N_u{}^5\cdot(2\cdot A-1)-A^2\cdot N_u{}^3\cdot\left[(D-E)\cdot C^2+D\cdot N_u{}^2\right]\right]^2}\cdot\sqrt{D\cdot N_u{}^2\cdot(A-1)^2+A^2\cdot C^2\cdot(D-E)}}{\left(D\cdot N_u{}^2-2\cdot A\cdot D\cdot N_u{}^2+A^2\cdot C^2\cdot D-A^2\cdot C^2\cdot E+A^2\cdot D\cdot N_u{}^2\right)\cdot\sqrt{A^2\cdot C^2\cdot E\cdot N_u{}^6\cdot\left[D\cdot N_u{}^2\cdot(A-1)^2+A^2\cdot C^2\cdot(D-E)\right]}}$$

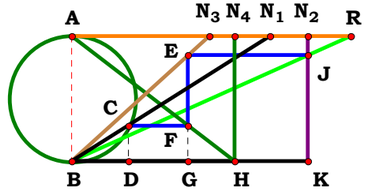
0, 2, 3, 4, 5:

$$\frac{C\cdot\sqrt{E}\cdot\sqrt{C^2\cdot(D-E)+D\cdot N_u{}^2\cdot(B-1)^2}\cdot\sqrt{\left[N_u{}^3\cdot\left[(D-E)\cdot C^2+D\cdot N_u{}^2\right]+B\cdot D\cdot N_u{}^5\cdot(B-2)\right]^2}}{\sqrt{C^2\cdot E\cdot N_u{}^6\cdot\left[C^2\cdot(D-E)+D\cdot N_u{}^2\cdot(B-1)^2\right]}\cdot\left(C^2\cdot D-C^2\cdot E+D\cdot N_u{}^2-2\cdot B\cdot D\cdot N_u{}^2+B^2\cdot D\cdot N_u{}^2\right)}$$

1, 2, 3, 4, 5:

$$\frac{A\cdot C\cdot\sqrt{E}\cdot\sqrt{A^2\cdot C^2\cdot(D-E)+D\cdot N_u{}^2\cdot(A-B)^2}\cdot\sqrt{\left[A^2\cdot N_u{}^3\cdot\left[(D-E)\cdot C^2+D\cdot N_u{}^2\right]+B\cdot D\cdot N_u{}^5\cdot(B-2\cdot A)\right]^2}}{\left(A^2\cdot C^2\cdot D-A^2\cdot C^2\cdot E+A^2\cdot D\cdot N_u{}^2+B^2\cdot D\cdot N_u{}^2-2\cdot A\cdot B\cdot D\cdot N_u{}^2\right)\cdot\sqrt{A^2\cdot C^2\cdot E\cdot N_u{}^6\cdot\left[A^2\cdot C^2\cdot(D-E)+D\cdot N_u{}^2\cdot(A-B)^2\right]}}$$

2SMT7R3



$N_1 = 1.58586$
$N_2 = 1.88889$
$N_3 = 1.10101$
$N_4 = 1.30303$
$R = 2.23066$

Unit. $AB := 1$ Given. $N_1 := 1.58586$ $N_2 := 1.88889$ $N_3 := 1.10101$

$N_4 := 1.30303$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{D \cdot \left(A^2 + N_u{}^2\right)}{B \cdot C \cdot N_u} = 2.230659$$

$$Num := \frac{D \cdot \left(A^2 + N_u{}^2\right)}{\sqrt{\left[D \cdot \left(A^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{B \cdot C \cdot N_u}{\sqrt{\left(B \cdot C \cdot N_u\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u{}^2}}{B \cdot C \cdot N_u \cdot \sqrt{D^2 \cdot \left(A^2 + N_u{}^2\right)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $$\frac{\sqrt{N_u^{\,2}}\cdot\left(N_u^{\,2}+1\right)}{N_u\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}$$

1, 0, 0, 0: $$\frac{\sqrt{N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}\right)}{N_u\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}$$

0, 2, 0, 0: $$\frac{\sqrt{B^2\cdot N_u^{\,2}}\cdot\left(N_u^{\,2}+1\right)}{B\cdot N_u\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}$$

1, 2, 0, 0: $$\frac{\sqrt{B^2\cdot N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}\right)}{B\cdot N_u\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}$$

0, 0, 3, 0: $$\frac{\sqrt{C^2\cdot N_u^{\,2}}\cdot\left(N_u^{\,2}+1\right)}{C\cdot N_u\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}$$

1, 0, 3, 0: $$\frac{\sqrt{C^2\cdot N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}\right)}{C\cdot N_u\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}$$

0, 2, 3, 0: $$\frac{\left(N_u^{\,2}+1\right)\cdot\sqrt{B^2\cdot C^2\cdot N_u^{\,2}}}{B\cdot C\cdot N_u\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}$$

1, 2, 3, 0: $$\frac{\left(A^2+N_u^{\,2}\right)\cdot\sqrt{B^2\cdot C^2\cdot N_u^{\,2}}}{B\cdot C\cdot N_u\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}$$

0, 0, 0, 4: $$\frac{D\cdot\sqrt{N_u^{\,2}}\cdot\left(N_u^{\,2}+1\right)}{N_u\cdot\sqrt{D^2\cdot\left(N_u^{\,2}+1\right)^2}}$$

1, 0, 0, 4: $$\frac{D\cdot\sqrt{N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}\right)}{N_u\cdot\sqrt{D^2\cdot\left(A^2+N_u^{\,2}\right)^2}}$$

0, 2, 0, 4: $$\frac{D\cdot\sqrt{B^2\cdot N_u^{\,2}}\cdot\left(N_u^{\,2}+1\right)}{B\cdot N_u\cdot\sqrt{D^2\cdot\left(N_u^{\,2}+1\right)^2}}$$

1, 2, 0, 4: $$\frac{D\cdot\sqrt{B^2\cdot N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}\right)}{B\cdot N_u\cdot\sqrt{D^2\cdot\left(A^2+N_u^{\,2}\right)^2}}$$

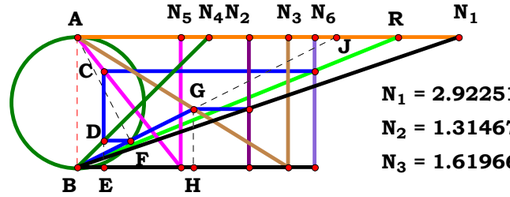
0, 0, 3, 4: $$\frac{D\cdot\sqrt{C^2\cdot N_u^{\,2}}\cdot\left(N_u^{\,2}+1\right)}{C\cdot N_u\cdot\sqrt{D^2\cdot\left(N_u^{\,2}+1\right)^2}}$$

1, 0, 3, 4: $$\frac{D\cdot\sqrt{C^2\cdot N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}\right)}{C\cdot N_u\cdot\sqrt{D^2\cdot\left(A^2+N_u^{\,2}\right)^2}}$$

0, 2, 3, 4: $$\frac{D\cdot\left(N_u^{\,2}+1\right)\cdot\sqrt{B^2\cdot C^2\cdot N_u^{\,2}}}{B\cdot C\cdot N_u\cdot\sqrt{D^2\cdot\left(N_u^{\,2}+1\right)^2}}$$

1, 2, 3, 4: $$\frac{D\cdot\left(A^2+N_u^{\,2}\right)\cdot\sqrt{B^2\cdot C^2\cdot N_u^{\,2}}}{B\cdot C\cdot N_u\cdot\sqrt{D^2\cdot\left(A^2+N_u^{\,2}\right)^2}}$$

2SMT7R4



$N_1 = 2.92251$
$N_2 = 1.31467$
$N_3 = 1.61966$
$N_4 = 1.00709$
$N_5 = 0.79015$
$N_6 = 1.82065$
$R = 2.45655$

Unit. $AB := 1$ Given. $N_1 := 2.92251$ $N_2 := 1.31467$ $N_3 := 1.61966$ $N_4 := 1.00709$ $N_5 := .79015$ $N_6 := 1.82065$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u^3 \cdot D \cdot (A-B)^2 + A^2 \cdot C^2 \cdot D \cdot N_u}{N_u^2 \cdot D \cdot F \cdot (A-B)^2 + A^2 \cdot C^2 \cdot F \cdot (D-E)} = 2.456551$$

$$Num := \frac{N_u^3 \cdot D \cdot (A-B)^2 + A^2 \cdot C^2 \cdot D \cdot N_u}{\sqrt{\left[N_u^3 \cdot D \cdot (A-B)^2 + A^2 \cdot C^2 \cdot D \cdot N_u\right]^2}}$$

$$Den := \frac{N_u^2 \cdot D \cdot F \cdot (A-B)^2 + A^2 \cdot C^2 \cdot F \cdot (D-E)}{\sqrt{\left[N_u^2 \cdot D \cdot F \cdot (A-B)^2 + A^2 \cdot C^2 \cdot F \cdot (D-E)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left[A^2 \cdot C^2 \cdot F \cdot (D-E) + D \cdot F \cdot N_u^2 \cdot (A-B)^2\right]^2} \cdot D \cdot N_u \cdot \left(A^2 \cdot C^2 + A^2 \cdot N_u^2 - 2 \cdot A \cdot B \cdot N_u^2 + B^2 \cdot N_u^2\right)}{F \cdot \left(A^2 \cdot C^2 \cdot D - A^2 \cdot C^2 \cdot E + A^2 \cdot D \cdot N_u^2 + B^2 \cdot D \cdot N_u^2 - 2 \cdot A \cdot B \cdot D \cdot N_u^2\right) \cdot \sqrt{\left[D \cdot N_u^3 \cdot (A-B)^2 + A^2 \cdot C^2 \cdot D \cdot N_u\right]^2}} = 0$$

For 6 variables there are 64 subsets.

0, 0, 0, 0, 0, 0: 0

1, 0, 0, 0, 0, 0:
$$\frac{N_u \cdot \sqrt{N_u^4 \cdot (A-1)^4} \cdot \left(A^2 \cdot N_u^2 + A^2 - 2 \cdot A \cdot N_u^2 + N_u^2\right)}{\sqrt{\left[N_u^3 \cdot (A-1)^2 + A^2 \cdot N_u\right]^2} \cdot \left(A^2 \cdot N_u^2 - 2 \cdot A \cdot N_u^2 + N_u^2\right)}$$

0, 2, 0, 0, 0, 0:
$$\frac{N_u \cdot \sqrt{N_u^4 \cdot (B-1)^4} \cdot \left(B^2 \cdot N_u^2 - 2 \cdot B \cdot N_u^2 + N_u^2 + 1\right)}{\sqrt{\left[N_u + N_u^3 \cdot (B-1)^2\right]^2} \cdot \left(B^2 \cdot N_u^2 - 2 \cdot B \cdot N_u^2 + N_u^2\right)}$$

1, 2, 0, 0, 0, 0:
$$\frac{N_u \cdot \sqrt{N_u^4 \cdot (A-B)^4} \cdot \left(A^2 \cdot N_u^2 + A^2 - 2 \cdot A \cdot B \cdot N_u^2 + B^2 \cdot N_u^2\right)}{\sqrt{\left[N_u^3 \cdot (A-B)^2 + A^2 \cdot N_u\right]^2} \cdot \left(A^2 \cdot N_u^2 - 2 \cdot A \cdot B \cdot N_u^2 + B^2 \cdot N_u^2\right)}$$

0, 0, 3, 0, 0, 0: 0

1, 0, 3, 0, 0, 0:
$$\frac{N_u \cdot \sqrt{N_u^4 \cdot (A-1)^4} \cdot \left(A^2 \cdot C^2 + A^2 \cdot N_u^2 - 2 \cdot A \cdot N_u^2 + N_u^2\right)}{\sqrt{\left[N_u^3 \cdot (A-1)^2 + A^2 \cdot C^2 \cdot N_u\right]^2} \cdot \left(A^2 \cdot N_u^2 - 2 \cdot A \cdot N_u^2 + N_u^2\right)}$$

0, 2, 3, 0, 0, 0:
$$\frac{N_u \cdot \sqrt{N_u^4 \cdot (B-1)^4} \cdot \left(B^2 \cdot N_u^2 - 2 \cdot B \cdot N_u^2 + C^2 + N_u^2\right)}{\sqrt{\left[N_u^3 \cdot (B-1)^2 + C^2 \cdot N_u\right]^2} \cdot \left(B^2 \cdot N_u^2 - 2 \cdot B \cdot N_u^2 + N_u^2\right)}$$

1, 2, 3, 0, 0, 0:
$$\frac{N_u \cdot \sqrt{N_u^4 \cdot (A-B)^4} \cdot \left(A^2 \cdot C^2 + A^2 \cdot N_u^2 - 2 \cdot A \cdot B \cdot N_u^2 + B^2 \cdot N_u^2\right)}{\sqrt{\left[N_u^3 \cdot (A-B)^2 + A^2 \cdot C^2 \cdot N_u\right]^2} \cdot \left(A^2 \cdot N_u^2 - 2 \cdot A \cdot B \cdot N_u^2 + B^2 \cdot N_u^2\right)}$$

0, 0, 0, 4, 0, 0:

$$\frac{D\cdot N_u\cdot\sqrt{\left[A^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-1)^2\right]^2}\cdot\left(A^2\cdot N_u{}^2+A^2-2\cdot A\cdot N_u{}^2+N_u{}^2\right)}{\sqrt{\left[D\cdot N_u{}^3\cdot(A-1)^2+A^2\cdot D\cdot N_u\right]^2}\cdot\left(A^2\cdot D-A^2+D\cdot N_u{}^2-2\cdot A\cdot D\cdot N_u{}^2+A^2\cdot D\cdot N_u{}^2\right)}$$

1, 0, 0, 4, 0, 0:

$$\frac{D\cdot N_u\cdot\sqrt{\left[A^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-1)^2\right]^2}\cdot\left(A^2\cdot N_u{}^2+A^2-2\cdot A\cdot N_u{}^2+N_u{}^2\right)}{\sqrt{\left[D\cdot N_u{}^3\cdot(A-1)^2+A^2\cdot D\cdot N_u\right]^2}\cdot\left(A^2\cdot D-A^2+D\cdot N_u{}^2-2\cdot A\cdot D\cdot N_u{}^2+A^2\cdot D\cdot N_u{}^2\right)}$$

0, 2, 0, 4, 0, 0:

$$\frac{D\cdot N_u\cdot\sqrt{\left[D+D\cdot N_u{}^2\cdot(B-1)^2-1\right]^2}\cdot\left(B^2\cdot N_u{}^2-2\cdot B\cdot N_u{}^2+N_u{}^2+1\right)}{\sqrt{\left[D\cdot N_u+D\cdot N_u{}^3\cdot(B-1)^2\right]^2}\cdot\left(D\cdot B^2\cdot N_u{}^2-2\cdot D\cdot B\cdot N_u{}^2+D\cdot N_u{}^2+D-1\right)}$$

1, 2, 0, 4, 0, 0:

$$\frac{D\cdot N_u\cdot\sqrt{\left[A^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-B)^2\right]^2}\cdot\left(A^2\cdot N_u{}^2+A^2-2\cdot A\cdot B\cdot N_u{}^2+B^2\cdot N_u{}^2\right)}{\sqrt{\left[A^2\cdot D\cdot N_u+D\cdot N_u{}^3\cdot(A-B)^2\right]^2}\cdot\left(A^2\cdot D-A^2+A^2\cdot D\cdot N_u{}^2+B^2\cdot D\cdot N_u{}^2-2\cdot A\cdot B\cdot D\cdot N_u{}^2\right)}$$

0, 0, 3, 4, 0, 0:

$$-\frac{C^2\cdot D\cdot N_u\cdot\sqrt{C^4\cdot(D-1)^2}}{\left(C^2-C^2\cdot D\right)\cdot\sqrt{C^4\cdot D^2\cdot N_u{}^2}}$$

1, 0, 3, 4, 0, 0:

$$\frac{D\cdot N_u\cdot\sqrt{\left[A^2\cdot C^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-1)^2\right]^2}\cdot\left(A^2\cdot C^2+A^2\cdot N_u{}^2-2\cdot A\cdot N_u{}^2+N_u{}^2\right)}{\sqrt{\left[D\cdot N_u{}^3\cdot(A-1)^2+A^2\cdot C^2\cdot D\cdot N_u\right]^2}\cdot\left(D\cdot N_u{}^2-A^2\cdot C^2-2\cdot A\cdot D\cdot N_u{}^2+A^2\cdot C^2\cdot D+A^2\cdot D\cdot N_u{}^2\right)}$$

0, 2, 3, 4, 0, 0:

$$\frac{D\cdot N_u\cdot\sqrt{\left[C^2\cdot(D-1)+D\cdot N_u{}^2\cdot(B-1)^2\right]^2}\cdot\left(B^2\cdot N_u{}^2-2\cdot B\cdot N_u{}^2+C^2+N_u{}^2\right)}{\sqrt{\left[D\cdot N_u{}^3\cdot(B-1)^2+C^2\cdot D\cdot N_u\right]^2}\cdot\left(C^2\cdot D-C^2+D\cdot N_u{}^2-2\cdot B\cdot D\cdot N_u{}^2+B^2\cdot D\cdot N_u{}^2\right)}$$

1, 2, 3, 4, 0, 0:

$$\frac{D\cdot N_u\cdot\sqrt{\left[A^2\cdot C^2\cdot(D-1)+D\cdot N_u{}^2\cdot(A-B)^2\right]^2}\cdot\left(A^2\cdot C^2+A^2\cdot N_u{}^2-2\cdot A\cdot B\cdot N_u{}^2+B^2\cdot N_u{}^2\right)}{\sqrt{\left[D\cdot N_u{}^3\cdot(A-B)^2+A^2\cdot C^2\cdot D\cdot N_u\right]^2}\cdot\left(A^2\cdot C^2\cdot D-A^2\cdot C^2+A^2\cdot D\cdot N_u{}^2+B^2\cdot D\cdot N_u{}^2-2\cdot A\cdot B\cdot D\cdot N_u{}^2\right)}$$

0, 0, 0, 0, 5, 0:

$$-\frac{N_u \cdot \sqrt{(E-1)^2}}{(E-1) \cdot \sqrt{{N_u}^2}}$$

1, 0, 0, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{\left[A^2 \cdot (E-1) - {N_u}^2 \cdot (A-1)^2\right]^2} \cdot \left(A^2 \cdot {N_u}^2 + A^2 - 2 \cdot A \cdot {N_u}^2 + {N_u}^2\right)}{\sqrt{\left[{N_u}^3 \cdot (A-1)^2 + A^2 \cdot N_u\right]^2} \cdot \left(A^2 + {N_u}^2 + A^2 \cdot {N_u}^2 - A^2 \cdot E - 2 \cdot A \cdot {N_u}^2\right)}$$

0, 2, 0, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{\left[{N_u}^2 \cdot (B-1)^2 - E + 1\right]^2} \cdot \left(B^2 \cdot {N_u}^2 - 2 \cdot B \cdot {N_u}^2 + {N_u}^2 + 1\right)}{\sqrt{\left[N_u + {N_u}^3 \cdot (B-1)^2\right]^2} \cdot \left(B^2 \cdot {N_u}^2 - 2 \cdot B \cdot {N_u}^2 + {N_u}^2 - E + 1\right)}$$

1, 2, 0, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{\left[A^2 \cdot (E-1) - {N_u}^2 \cdot (A-B)^2\right]^2} \cdot \left(A^2 \cdot {N_u}^2 + A^2 - 2 \cdot A \cdot B \cdot {N_u}^2 + B^2 \cdot {N_u}^2\right)}{\sqrt{\left[{N_u}^3 \cdot (A-B)^2 + A^2 \cdot N_u\right]^2} \cdot \left(A^2 + A^2 \cdot {N_u}^2 + B^2 \cdot {N_u}^2 - A^2 \cdot E - 2 \cdot A \cdot B \cdot {N_u}^2\right)}$$

0, 0, 3, 0, 5, 0:

$$\frac{C^2 \cdot N_u \cdot \sqrt{C^4 \cdot (E-1)^2}}{\left(C^2 - C^2 \cdot E\right) \cdot \sqrt{C^4 \cdot {N_u}^2}}$$

1, 0, 3, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{\left[{N_u}^2 \cdot (A-1)^2 - A^2 \cdot C^2 \cdot (E-1)\right]^2} \cdot \left(A^2 \cdot C^2 + A^2 \cdot {N_u}^2 - 2 \cdot A \cdot {N_u}^2 + {N_u}^2\right)}{\sqrt{\left[{N_u}^3 \cdot (A-1)^2 + A^2 \cdot C^2 \cdot N_u\right]^2} \cdot \left({N_u}^2 + A^2 \cdot C^2 + A^2 \cdot {N_u}^2 - 2 \cdot A \cdot {N_u}^2 - A^2 \cdot C^2 \cdot E\right)}$$

0, 2, 3, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{\left[C^2 \cdot (E-1) - {N_u}^2 \cdot (B-1)^2\right]^2} \cdot \left(B^2 \cdot {N_u}^2 - 2 \cdot B \cdot {N_u}^2 + C^2 + {N_u}^2\right)}{\sqrt{\left[{N_u}^3 \cdot (B-1)^2 + C^2 \cdot N_u\right]^2} \cdot \left(C^2 + {N_u}^2 + B^2 \cdot {N_u}^2 - C^2 \cdot E - 2 \cdot B \cdot {N_u}^2\right)}$$

1, 2, 3, 0, 5, 0:

$$\frac{N_u \cdot \sqrt{\left[{N_u}^2 \cdot (A-B)^2 - A^2 \cdot C^2 \cdot (E-1)\right]^2} \cdot \left(A^2 \cdot C^2 + A^2 \cdot {N_u}^2 - 2 \cdot A \cdot B \cdot {N_u}^2 + B^2 \cdot {N_u}^2\right)}{\sqrt{\left[{N_u}^3 \cdot (A-B)^2 + A^2 \cdot C^2 \cdot N_u\right]^2} \cdot \left(A^2 \cdot C^2 + A^2 \cdot {N_u}^2 + B^2 \cdot {N_u}^2 - 2 \cdot A \cdot B \cdot {N_u}^2 - A^2 \cdot C^2 \cdot E\right)}$$

0, 0, 0, 4, 5, 0:

$$\frac{D \cdot N_u \cdot \sqrt{(D-E)^2}}{\sqrt{D^2 \cdot {N_u}^2} \cdot (D-E)}$$

1, 0, 0, 4, 5, 0:

$$\frac{D \cdot N_u \cdot \sqrt{\left[A^2 \cdot (D-E) + D \cdot {N_u}^2 \cdot (A-1)^2\right]^2} \cdot \left(A^2 \cdot {N_u}^2 + A^2 - 2 \cdot A \cdot {N_u}^2 + {N_u}^2\right)}{\sqrt{\left[D \cdot {N_u}^3 \cdot (A-1)^2 + A^2 \cdot D \cdot N_u\right]^2} \cdot \left(A^2 \cdot D - A^2 \cdot E + D \cdot {N_u}^2 - 2 \cdot A \cdot D \cdot {N_u}^2 + A^2 \cdot D \cdot {N_u}^2\right)}$$

0, 2, 0, 4, 5, 0:

$$\frac{D \cdot N_u \cdot \sqrt{\left[D - E + D \cdot {N_u}^2 \cdot (B-1)^2\right]^2} \cdot \left(B^2 \cdot {N_u}^2 - 2 \cdot B \cdot {N_u}^2 + {N_u}^2 + 1\right)}{\sqrt{\left[D \cdot N_u + D \cdot {N_u}^3 \cdot (B-1)^2\right]^2} \cdot \left(D \cdot B^2 \cdot {N_u}^2 - 2 \cdot D \cdot B \cdot {N_u}^2 + D \cdot {N_u}^2 + D - E\right)}$$

1, 2, 0, 4, 5, 0:

$$\frac{D \cdot N_u \cdot \sqrt{\left[A^2 \cdot (D-E) + D \cdot {N_u}^2 \cdot (A-B)^2\right]^2} \cdot \left(A^2 \cdot {N_u}^2 + A^2 - 2 \cdot A \cdot B \cdot {N_u}^2 + B^2 \cdot {N_u}^2\right)}{\sqrt{\left[A^2 \cdot D \cdot N_u + D \cdot {N_u}^3 \cdot (A-B)^2\right]^2} \cdot \left(A^2 \cdot D - A^2 \cdot E + A^2 \cdot D \cdot {N_u}^2 + B^2 \cdot D \cdot {N_u}^2 - 2 \cdot A \cdot B \cdot D \cdot {N_u}^2\right)}$$

0, 0, 3, 4, 5, 0:

$$\frac{C^2 \cdot D \cdot N_u \cdot \sqrt{C^4 \cdot (D-E)^2}}{\left(C^2 \cdot D - C^2 \cdot E\right) \cdot \sqrt{C^4 \cdot D^2 \cdot {N_u}^2}}$$

1, 0, 3, 4, 5, 0:

$$\frac{D \cdot N_u \cdot \sqrt{\left[D \cdot {N_u}^2 \cdot (A-1)^2 + A^2 \cdot C^2 \cdot (D-E)\right]^2} \cdot \left(A^2 \cdot C^2 + A^2 \cdot {N_u}^2 - 2 \cdot A \cdot {N_u}^2 + {N_u}^2\right)}{\sqrt{\left[D \cdot {N_u}^3 \cdot (A-1)^2 + A^2 \cdot C^2 \cdot D \cdot N_u\right]^2} \cdot \left(D \cdot {N_u}^2 - 2 \cdot A \cdot D \cdot {N_u}^2 + A^2 \cdot C^2 \cdot D - A^2 \cdot C^2 \cdot E + A^2 \cdot D \cdot {N_u}^2\right)}$$

0, 2, 3, 4, 5, 0:

$$\frac{D \cdot N_u \cdot \sqrt{\left[C^2 \cdot (D-E) + D \cdot {N_u}^2 \cdot (B-1)^2\right]^2} \cdot \left(B^2 \cdot {N_u}^2 - 2 \cdot B \cdot {N_u}^2 + C^2 + {N_u}^2\right)}{\sqrt{\left[D \cdot {N_u}^3 \cdot (B-1)^2 + C^2 \cdot D \cdot N_u\right]^2} \cdot \left(C^2 \cdot D - C^2 \cdot E + D \cdot {N_u}^2 - 2 \cdot B \cdot D \cdot {N_u}^2 + B^2 \cdot D \cdot {N_u}^2\right)}$$

1, 2, 3, 4, 5, 0:

$$\frac{D \cdot N_u \cdot \sqrt{\left[A^2 \cdot C^2 \cdot (D-E) + D \cdot {N_u}^2 \cdot (A-B)^2\right]^2} \cdot \left(A^2 \cdot C^2 + A^2 \cdot {N_u}^2 - 2 \cdot A \cdot B \cdot {N_u}^2 + B^2 \cdot {N_u}^2\right)}{\sqrt{\left[D \cdot {N_u}^3 \cdot (A-B)^2 + A^2 \cdot C^2 \cdot D \cdot N_u\right]^2} \cdot \left(A^2 \cdot C^2 \cdot D - A^2 \cdot C^2 \cdot E + A^2 \cdot D \cdot {N_u}^2 + B^2 \cdot D \cdot {N_u}^2 - 2 \cdot A \cdot B \cdot D \cdot {N_u}^2\right)}$$

0, 0, 0, 0, 0, 6: 0

1, 0, 0, 0, 0, 6: $$\frac{N_u \cdot \sqrt{F^2 \cdot {N_u}^4 \cdot (A-1)^4} \cdot \left(A^2 \cdot {N_u}^2 + A^2 - 2 \cdot A \cdot {N_u}^2 + {N_u}^2\right)}{F \cdot \sqrt{\left[{N_u}^3 \cdot (A-1)^2 + A^2 \cdot N_u\right]^2} \cdot \left(A^2 \cdot {N_u}^2 - 2 \cdot A \cdot {N_u}^2 + {N_u}^2\right)}$$

0, 2, 0, 0, 0, 6: $$\frac{N_u \cdot \sqrt{F^2 \cdot {N_u}^4 \cdot (B-1)^4} \cdot \left(B^2 \cdot {N_u}^2 - 2 \cdot B \cdot {N_u}^2 + {N_u}^2 + 1\right)}{F \cdot \sqrt{\left[N_u + {N_u}^3 \cdot (B-1)^2\right]^2} \cdot \left(B^2 \cdot {N_u}^2 - 2 \cdot B \cdot {N_u}^2 + {N_u}^2\right)}$$

1, 2, 0, 0, 0, 6: $$\frac{N_u \cdot \sqrt{F^2 \cdot {N_u}^4 \cdot (A-B)^4} \cdot \left(A^2 \cdot {N_u}^2 + A^2 - 2 \cdot A \cdot B \cdot {N_u}^2 + B^2 \cdot {N_u}^2\right)}{F \cdot \sqrt{\left[{N_u}^3 \cdot (A-B)^2 + A^2 \cdot N_u\right]^2} \cdot \left(A^2 \cdot {N_u}^2 - 2 \cdot A \cdot B \cdot {N_u}^2 + B^2 \cdot {N_u}^2\right)}$$

0, 0, 3, 0, 0, 6: 0

1, 0, 3, 0, 0, 6: $$\frac{N_u \cdot \sqrt{F^2 \cdot {N_u}^4 \cdot (A-1)^4} \cdot \left(A^2 \cdot C^2 + A^2 \cdot {N_u}^2 - 2 \cdot A \cdot {N_u}^2 + {N_u}^2\right)}{F \cdot \sqrt{\left[{N_u}^3 \cdot (A-1)^2 + A^2 \cdot C^2 \cdot N_u\right]^2} \cdot \left(A^2 \cdot {N_u}^2 - 2 \cdot A \cdot {N_u}^2 + {N_u}^2\right)}$$

0, 2, 3, 0, 0, 6: $$\frac{N_u \cdot \sqrt{F^2 \cdot {N_u}^4 \cdot (B-1)^4} \cdot \left(B^2 \cdot {N_u}^2 - 2 \cdot B \cdot {N_u}^2 + C^2 + {N_u}^2\right)}{F \cdot \sqrt{\left[{N_u}^3 \cdot (B-1)^2 + C^2 \cdot N_u\right]^2} \cdot \left(B^2 \cdot {N_u}^2 - 2 \cdot B \cdot {N_u}^2 + {N_u}^2\right)}$$

1, 2, 3, 0, 0, 6: $$\frac{N_u \cdot \sqrt{F^2 \cdot {N_u}^4 \cdot (A-B)^4} \cdot \left(A^2 \cdot C^2 + A^2 \cdot {N_u}^2 - 2 \cdot A \cdot B \cdot {N_u}^2 + B^2 \cdot {N_u}^2\right)}{F \cdot \sqrt{\left[{N_u}^3 \cdot (A-B)^2 + A^2 \cdot C^2 \cdot N_u\right]^2} \cdot \left(A^2 \cdot {N_u}^2 - 2 \cdot A \cdot B \cdot {N_u}^2 + B^2 \cdot {N_u}^2\right)}$$

0, 0, 0, 4, 0, 6:

$$\frac{D \cdot N_u \cdot \sqrt{F^2 \cdot (D-1)^2}}{F \cdot (D-1) \cdot \sqrt{D^2 \cdot {N_u}^2}}$$

1, 0, 0, 4, 0, 6:

$$\frac{D \cdot N_u \cdot \sqrt{\left[A^2 \cdot F \cdot (D-1) + D \cdot F \cdot {N_u}^2 \cdot (A-1)^2\right]^2} \cdot \left(A^2 \cdot {N_u}^2 + A^2 - 2 \cdot A \cdot {N_u}^2 + {N_u}^2\right)}{F \cdot \sqrt{\left[D \cdot {N_u}^3 \cdot (A-1)^2 + A^2 \cdot D \cdot N_u\right]^2} \cdot \left(A^2 \cdot D - A^2 + D \cdot {N_u}^2 - 2 \cdot A \cdot D \cdot {N_u}^2 + A^2 \cdot D \cdot {N_u}^2\right)}$$

0, 2, 0, 4, 0, 6:

$$\frac{D \cdot N_u \cdot \sqrt{\left[F \cdot (D-1) + D \cdot F \cdot {N_u}^2 \cdot (B-1)^2\right]^2} \cdot \left(B^2 \cdot {N_u}^2 - 2 \cdot B \cdot {N_u}^2 + {N_u}^2 + 1\right)}{F \cdot \sqrt{\left[D \cdot N_u + D \cdot {N_u}^3 \cdot (B-1)^2\right]^2} \cdot \left(D \cdot B^2 \cdot {N_u}^2 - 2 \cdot D \cdot B \cdot {N_u}^2 + D \cdot {N_u}^2 + D - 1\right)}$$

1, 2, 0, 4, 0, 6:

$$\frac{D \cdot N_u \cdot \sqrt{\left[A^2 \cdot F \cdot (D-1) + D \cdot F \cdot {N_u}^2 \cdot (A-B)^2\right]^2} \cdot \left(A^2 \cdot {N_u}^2 + A^2 - 2 \cdot A \cdot B \cdot {N_u}^2 + B^2 \cdot {N_u}^2\right)}{F \cdot \sqrt{\left[A^2 \cdot D \cdot N_u + D \cdot {N_u}^3 \cdot (A-B)^2\right]^2} \cdot \left(A^2 \cdot D - A^2 + A^2 \cdot D \cdot {N_u}^2 + B^2 \cdot D \cdot {N_u}^2 - 2 \cdot A \cdot B \cdot D \cdot {N_u}^2\right)}$$

0, 0, 3, 4, 0, 6:

$$-\frac{C^2 \cdot D \cdot N_u \cdot \sqrt{C^4 \cdot F^2 \cdot (D-1)^2}}{F \cdot \left(C^2 - C^2 \cdot D\right) \cdot \sqrt{C^4 \cdot D^2 \cdot {N_u}^2}}$$

1, 0, 3, 4, 0, 6:

$$\frac{D \cdot N_u \cdot \sqrt{\left[A^2 \cdot C^2 \cdot F \cdot (D-1) + D \cdot F \cdot {N_u}^2 \cdot (A-1)^2\right]^2} \cdot \left(A^2 \cdot C^2 + A^2 \cdot {N_u}^2 - 2 \cdot A \cdot {N_u}^2 + {N_u}^2\right)}{F \cdot \sqrt{\left[D \cdot {N_u}^3 \cdot (A-1)^2 + A^2 \cdot C^2 \cdot D \cdot N_u\right]^2} \cdot \left(D \cdot {N_u}^2 - A^2 \cdot C^2 - 2 \cdot A \cdot D \cdot {N_u}^2 + A^2 \cdot C^2 \cdot D + A^2 \cdot D \cdot {N_u}^2\right)}$$

0, 2, 3, 4, 0, 6:

$$\frac{D \cdot N_u \cdot \sqrt{\left[C^2 \cdot F \cdot (D-1) + D \cdot F \cdot {N_u}^2 \cdot (B-1)^2\right]^2} \cdot \left(B^2 \cdot {N_u}^2 - 2 \cdot B \cdot {N_u}^2 + C^2 + {N_u}^2\right)}{F \cdot \sqrt{\left[D \cdot {N_u}^3 \cdot (B-1)^2 + C^2 \cdot D \cdot N_u\right]^2} \cdot \left(C^2 \cdot D - C^2 + D \cdot {N_u}^2 - 2 \cdot B \cdot D \cdot {N_u}^2 + B^2 \cdot D \cdot {N_u}^2\right)}$$

1, 2, 3, 4, 0, 6:

$$\frac{D \cdot N_u \cdot \sqrt{\left[D \cdot F \cdot {N_u}^2 \cdot (A-B)^2 + A^2 \cdot C^2 \cdot F \cdot (D-1)\right]^2} \cdot \left(A^2 \cdot C^2 + A^2 \cdot {N_u}^2 - 2 \cdot A \cdot B \cdot {N_u}^2 + B^2 \cdot {N_u}^2\right)}{F \cdot \sqrt{\left[D \cdot {N_u}^3 \cdot (A-B)^2 + A^2 \cdot C^2 \cdot D \cdot N_u\right]^2} \cdot \left(A^2 \cdot C^2 \cdot D - A^2 \cdot C^2 + A^2 \cdot D \cdot {N_u}^2 + B^2 \cdot D \cdot {N_u}^2 - 2 \cdot A \cdot B \cdot D \cdot {N_u}^2\right)}$$

0, 0, 0, 0, 5, 6:

$$-\frac{N_u \cdot \sqrt{F^2 \cdot (E-1)^2}}{F \cdot (E-1) \cdot \sqrt{N_u{}^2}}$$

1, 0, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{\left[F \cdot N_u{}^2 \cdot (A-1)^2 - A^2 \cdot F \cdot (E-1)\right]^2} \cdot \left(A^2 \cdot N_u{}^2 + A^2 - 2 \cdot A \cdot N_u{}^2 + N_u{}^2\right)}{F \cdot \sqrt{\left[N_u{}^3 \cdot (A-1)^2 + A^2 \cdot N_u\right]^2} \cdot \left(A^2 + N_u{}^2 + A^2 \cdot N_u{}^2 - A^2 \cdot E - 2 \cdot A \cdot N_u{}^2\right)}$$

0, 2, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{\left[F \cdot (E-1) - F \cdot N_u{}^2 \cdot (B-1)^2\right]^2} \cdot \left(B^2 \cdot N_u{}^2 - 2 \cdot B \cdot N_u{}^2 + N_u{}^2 + 1\right)}{F \cdot \sqrt{\left[N_u + N_u{}^3 \cdot (B-1)^2\right]^2} \cdot \left(B^2 \cdot N_u{}^2 - 2 \cdot B \cdot N_u{}^2 + N_u{}^2 - E + 1\right)}$$

1, 2, 0, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{\left[A^2 \cdot F \cdot (E-1) - F \cdot N_u{}^2 \cdot (A-B)^2\right]^2} \cdot \left(A^2 \cdot N_u{}^2 + A^2 - 2 \cdot A \cdot B \cdot N_u{}^2 + B^2 \cdot N_u{}^2\right)}{F \cdot \sqrt{\left[N_u{}^3 \cdot (A-B)^2 + A^2 \cdot N_u\right]^2} \cdot \left(A^2 + A^2 \cdot N_u{}^2 + B^2 \cdot N_u{}^2 - A^2 \cdot E - 2 \cdot A \cdot B \cdot N_u{}^2\right)}$$

0, 0, 3, 0, 5, 6:

$$\frac{C^2 \cdot N_u \cdot \sqrt{C^4 \cdot F^2 \cdot (E-1)^2}}{F \cdot \left(C^2 - C^2 \cdot E\right) \cdot \sqrt{C^4 \cdot N_u{}^2}}$$

1, 0, 3, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{\left[F \cdot N_u{}^2 \cdot (A-1)^2 - A^2 \cdot C^2 \cdot F \cdot (E-1)\right]^2} \cdot \left(A^2 \cdot C^2 + A^2 \cdot N_u{}^2 - 2 \cdot A \cdot N_u{}^2 + N_u{}^2\right)}{F \cdot \sqrt{\left[N_u{}^3 \cdot (A-1)^2 + A^2 \cdot C^2 \cdot N_u\right]^2} \cdot \left(N_u{}^2 + A^2 \cdot C^2 + A^2 \cdot N_u{}^2 - 2 \cdot A \cdot N_u{}^2 - A^2 \cdot C^2 \cdot E\right)}$$

0, 2, 3, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{\left[F \cdot N_u{}^2 \cdot (B-1)^2 - C^2 \cdot F \cdot (E-1)\right]^2} \cdot \left(B^2 \cdot N_u{}^2 - 2 \cdot B \cdot N_u{}^2 + C^2 + N_u{}^2\right)}{F \cdot \sqrt{\left[N_u{}^3 \cdot (B-1)^2 + C^2 \cdot N_u\right]^2} \cdot \left(C^2 + N_u{}^2 + B^2 \cdot N_u{}^2 - C^2 \cdot E - 2 \cdot B \cdot N_u{}^2\right)}$$

1, 2, 3, 0, 5, 6:

$$\frac{N_u \cdot \sqrt{\left[F \cdot N_u{}^2 \cdot (A-B)^2 - A^2 \cdot C^2 \cdot F \cdot (E-1)\right]^2} \cdot \left(A^2 \cdot C^2 + A^2 \cdot N_u{}^2 - 2 \cdot A \cdot B \cdot N_u{}^2 + B^2 \cdot N_u{}^2\right)}{F \cdot \sqrt{\left[N_u{}^3 \cdot (A-B)^2 + A^2 \cdot C^2 \cdot N_u\right]^2} \cdot \left(A^2 \cdot C^2 + A^2 \cdot N_u{}^2 + B^2 \cdot N_u{}^2 - 2 \cdot A \cdot B \cdot N_u{}^2 - A^2 \cdot C^2 \cdot E\right)}$$

0, 0, 0, 4, 5, 6:

$$\frac{D \cdot N_u \cdot \sqrt{F^2 \cdot (D-E)^2}}{F \cdot \sqrt{D^2 \cdot N_u{}^2} \cdot (D-E)}$$

1, 0, 0, 4, 5, 6:

$$\frac{D \cdot N_u \cdot \sqrt{\left[A^2 \cdot F \cdot (D-E) + D \cdot F \cdot N_u{}^2 \cdot (A-1)^2\right]^2} \cdot \left(A^2 \cdot N_u{}^2 + A^2 - 2 \cdot A \cdot N_u{}^2 + N_u{}^2\right)}{F \cdot \sqrt{\left[D \cdot N_u{}^3 \cdot (A-1)^2 + A^2 \cdot D \cdot N_u\right]^2} \cdot \left(A^2 \cdot D - A^2 \cdot E + D \cdot N_u{}^2 - 2 \cdot A \cdot D \cdot N_u{}^2 + A^2 \cdot D \cdot N_u{}^2\right)}$$

0, 2, 0, 4, 5, 6:

$$\frac{D \cdot N_u \cdot \sqrt{\left[F \cdot (D-E) + D \cdot F \cdot N_u{}^2 \cdot (B-1)^2\right]^2} \cdot \left(B^2 \cdot N_u{}^2 - 2 \cdot B \cdot N_u{}^2 + N_u{}^2 + 1\right)}{F \cdot \sqrt{\left[D \cdot N_u + D \cdot N_u{}^3 \cdot (B-1)^2\right]^2} \cdot \left(D \cdot B^2 \cdot N_u{}^2 - 2 \cdot D \cdot B \cdot N_u{}^2 + D \cdot N_u{}^2 + D - E\right)}$$

1, 2, 0, 4, 5, 6:

$$\frac{D \cdot N_u \cdot \sqrt{\left[A^2 \cdot F \cdot (D-E) + D \cdot F \cdot N_u{}^2 \cdot (A-B)^2\right]^2} \cdot \left(A^2 \cdot N_u{}^2 + A^2 - 2 \cdot A \cdot B \cdot N_u{}^2 + B^2 \cdot N_u{}^2\right)}{F \cdot \sqrt{\left[A^2 \cdot D \cdot N_u + D \cdot N_u{}^3 \cdot (A-B)^2\right]^2} \cdot \left(A^2 \cdot D - A^2 \cdot E + A^2 \cdot D \cdot N_u{}^2 + B^2 \cdot D \cdot N_u{}^2 - 2 \cdot A \cdot B \cdot D \cdot N_u{}^2\right)}$$

0, 0, 3, 4, 5, 6:

$$\frac{C^2 \cdot D \cdot N_u \cdot \sqrt{C^4 \cdot F^2 \cdot (D-E)^2}}{F \cdot \left(C^2 \cdot D - C^2 \cdot E\right) \cdot \sqrt{C^4 \cdot D^2 \cdot N_u{}^2}}$$

1, 0, 3, 4, 5, 6:

$$\frac{D \cdot N_u \cdot \sqrt{\left[A^2 \cdot C^2 \cdot F \cdot (D-E) + D \cdot F \cdot N_u{}^2 \cdot (A-1)^2\right]^2} \cdot \left(A^2 \cdot C^2 + A^2 \cdot N_u{}^2 - 2 \cdot A \cdot N_u{}^2 + N_u{}^2\right)}{F \cdot \sqrt{\left[D \cdot N_u{}^3 \cdot (A-1)^2 + A^2 \cdot C^2 \cdot D \cdot N_u\right]^2} \cdot \left(D \cdot N_u{}^2 - 2 \cdot A \cdot D \cdot N_u{}^2 + A^2 \cdot C^2 \cdot D - A^2 \cdot C^2 \cdot E + A^2 \cdot D \cdot N_u{}^2\right)}$$

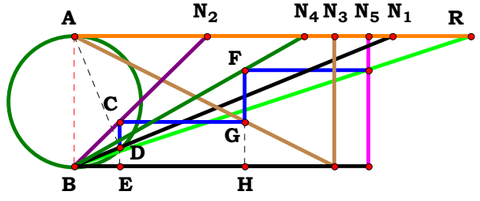
0, 2, 3, 4, 5, 6:

$$\frac{D \cdot N_u \cdot \sqrt{\left[C^2 \cdot F \cdot (D-E) + D \cdot F \cdot N_u{}^2 \cdot (B-1)^2\right]^2} \cdot \left(B^2 \cdot N_u{}^2 - 2 \cdot B \cdot N_u{}^2 + C^2 + N_u{}^2\right)}{F \cdot \sqrt{\left[D \cdot N_u{}^3 \cdot (B-1)^2 + C^2 \cdot D \cdot N_u\right]^2} \cdot \left(C^2 \cdot D - C^2 \cdot E + D \cdot N_u{}^2 - 2 \cdot B \cdot D \cdot N_u{}^2 + B^2 \cdot D \cdot N_u{}^2\right)}$$

1, 2, 3, 4, 5, 6:

$$\frac{\sqrt{\left[A^2 \cdot C^2 \cdot F \cdot (D-E) + D \cdot F \cdot N_u{}^2 \cdot (A-B)^2\right]^2} \cdot D \cdot N_u \cdot \left(A^2 \cdot C^2 + A^2 \cdot N_u{}^2 - 2 \cdot A \cdot B \cdot N_u{}^2 + B^2 \cdot N_u{}^2\right)}{F \cdot \left(A^2 \cdot C^2 \cdot D - A^2 \cdot C^2 \cdot E + A^2 \cdot D \cdot N_u{}^2 + B^2 \cdot D \cdot N_u{}^2 - 2 \cdot A \cdot B \cdot D \cdot N_u{}^2\right) \cdot \sqrt{\left[D \cdot N_u{}^3 \cdot (A-B)^2 + A^2 \cdot C^2 \cdot D \cdot N_u\right]^2}}$$

2SMT7R5



$N_1 = 2.43822$
$N_2 = 1.01441$
$N_3 = 1.99741$
$N_4 = 1.76258$
$N_5 = 2.25271$
$R = 3.03998$

Unit. $AB := 1$ Given. $N_1 := 2.43822$ $N_2 := 1.01441$ $N_3 := 1.99741$

$N_4 := 1.76258$ $N_5 := 2.25271$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{C \cdot N_u \cdot \left(A^2 + N_u{}^2\right)}{D \cdot E \cdot \left(A^2 - B \cdot A + N_u{}^2\right)} = 3.03998$$

$$Num := \frac{C \cdot N_u \cdot \left(A^2 + N_u{}^2\right)}{\sqrt{\left[C \cdot N_u \cdot \left(A^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{D \cdot E \cdot \left(A^2 - B \cdot A + N_u{}^2\right)}{\sqrt{\left[D \cdot E \cdot \left(A^2 - B \cdot A + N_u{}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot N_u \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{D^2 \cdot E^2 \cdot \left(A^2 - B \cdot A + N_u{}^2\right)^2}}{D \cdot E \cdot \left(A^2 - B \cdot A + N_u{}^2\right) \cdot \sqrt{C^2 \cdot N_u{}^2 \cdot \left(A^2 + N_u{}^2\right)^2}} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0:

$$\frac{\sqrt{N_u^4}\cdot\left(N_u^2+1\right)}{N_u\cdot\sqrt{N_u^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 0, 0, 0:

$$\frac{N_u\cdot\left(A^2+N_u^2\right)\cdot\sqrt{\left(A^2-A+N_u^2\right)^2}}{\sqrt{N_u^2\cdot\left(A^2+N_u^2\right)^2}\cdot\left(A^2-A+N_u^2\right)}$$

0, 2, 0, 0, 0:

$$\frac{N_u\cdot\left(N_u^2+1\right)\cdot\sqrt{\left(N_u^2-B+1\right)^2}}{\sqrt{N_u^2\cdot\left(N_u^2+1\right)^2}\cdot\left(N_u^2-B+1\right)}$$

1, 2, 0, 0, 0:

$$\frac{N_u\cdot\left(A^2+N_u^2\right)\cdot\sqrt{\left(A^2-B\cdot A+N_u^2\right)^2}}{\sqrt{N_u^2\cdot\left(A^2+N_u^2\right)^2}\cdot\left(A^2-B\cdot A+N_u^2\right)}$$

0, 0, 3, 0, 0:

$$\frac{C\cdot\sqrt{N_u^4}\cdot\left(N_u^2+1\right)}{N_u\cdot\sqrt{C^2\cdot N_u^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 3, 0, 0:

$$\frac{C\cdot N_u\cdot\left(A^2+N_u^2\right)\cdot\sqrt{\left(A^2-A+N_u^2\right)^2}}{\left(A^2-A+N_u^2\right)\cdot\sqrt{C^2\cdot N_u^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 2, 3, 0, 0:

$$\frac{C\cdot N_u\cdot\left(N_u^2+1\right)\cdot\sqrt{\left(N_u^2-B+1\right)^2}}{\sqrt{C^2\cdot N_u^2\cdot\left(N_u^2+1\right)^2}\cdot\left(N_u^2-B+1\right)}$$

1, 2, 3, 0, 0:

$$\frac{C\cdot N_u\cdot\left(A^2+N_u^2\right)\cdot\sqrt{\left(A^2-B\cdot A+N_u^2\right)^2}}{\left(A^2-B\cdot A+N_u^2\right)\cdot\sqrt{C^2\cdot N_u^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 0, 0, 4, 0:

$$\frac{\sqrt{D^2\cdot N_u^4}\cdot\left(N_u^2+1\right)}{D\cdot N_u\cdot\sqrt{N_u^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 0, 4, 0:

$$\frac{N_u\cdot\left(A^2+N_u^2\right)\cdot\sqrt{D^2\cdot\left(A^2-A+N_u^2\right)^2}}{D\cdot\sqrt{N_u^2\cdot\left(A^2+N_u^2\right)^2}\cdot\left(A^2-A+N_u^2\right)}$$

0, 2, 0, 4, 0:

$$\frac{N_u\cdot\sqrt{D^2\cdot\left(N_u^2-B+1\right)^2}\cdot\left(N_u^2+1\right)}{D\cdot\sqrt{N_u^2\cdot\left(N_u^2+1\right)^2}\cdot\left(N_u^2-B+1\right)}$$

1, 2, 0, 4, 0:

$$\frac{N_u\cdot\sqrt{D^2\cdot\left(A^2-B\cdot A+N_u^2\right)^2}\cdot\left(A^2+N_u^2\right)}{D\cdot\sqrt{N_u^2\cdot\left(A^2+N_u^2\right)^2}\cdot\left(A^2-B\cdot A+N_u^2\right)}$$

0, 0, 3, 4, 0:

$$\frac{C\cdot\sqrt{D^2\cdot N_u^4}\cdot\left(N_u^2+1\right)}{D\cdot N_u\cdot\sqrt{C^2\cdot N_u^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 3, 4, 0:

$$\frac{C\cdot N_u\cdot\left(A^2+N_u^2\right)\cdot\sqrt{D^2\cdot\left(A^2-A+N_u^2\right)^2}}{D\cdot\left(A^2-A+N_u^2\right)\cdot\sqrt{C^2\cdot N_u^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 2, 3, 4, 0:

$$\frac{C\cdot N_u\cdot\sqrt{D^2\cdot\left(N_u^2-B+1\right)^2}\cdot\left(N_u^2+1\right)}{D\cdot\sqrt{C^2\cdot N_u^2\cdot\left(N_u^2+1\right)^2}\cdot\left(N_u^2-B+1\right)}$$

1, 2, 3, 4, 0:

$$\frac{C\cdot N_u\cdot\sqrt{D^2\cdot\left(A^2-B\cdot A+N_u^2\right)^2}\cdot\left(A^2+N_u^2\right)}{D\cdot\left(A^2-B\cdot A+N_u^2\right)\cdot\sqrt{C^2\cdot N_u^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 0, 0, 0, 5:

$$\frac{\sqrt{E^2 \cdot N_u^4} \cdot \left(N_u^2 + 1\right)}{E \cdot N_u \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 0, 0, 5:

$$\frac{N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{E^2 \cdot \left(A^2 - A + N_u^2\right)^2}}{E \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2} \cdot \left(A^2 - A + N_u^2\right)}$$

0, 2, 0, 0, 5:

$$\frac{N_u \cdot \sqrt{E^2 \cdot \left(N_u^2 - B + 1\right)^2} \cdot \left(N_u^2 + 1\right)}{E \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2} \cdot \left(N_u^2 - B + 1\right)}$$

1, 2, 0, 0, 5:

$$\frac{N_u \cdot \sqrt{E^2 \cdot \left(A^2 - B \cdot A + N_u^2\right)^2} \cdot \left(A^2 + N_u^2\right)}{E \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2} \cdot \left(A^2 - B \cdot A + N_u^2\right)}$$

0, 0, 3, 0, 5:

$$\frac{C \cdot \sqrt{E^2 \cdot N_u^4} \cdot \left(N_u^2 + 1\right)}{E \cdot N_u \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 3, 0, 5:

$$\frac{C \cdot N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{E^2 \cdot \left(A^2 - A + N_u^2\right)^2}}{E \cdot \left(A^2 - A + N_u^2\right) \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 2, 3, 0, 5:

$$\frac{C \cdot N_u \cdot \sqrt{E^2 \cdot \left(N_u^2 - B + 1\right)^2} \cdot \left(N_u^2 + 1\right)}{E \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(N_u^2 + 1\right)^2} \cdot \left(N_u^2 - B + 1\right)}$$

1, 2, 3, 0, 5:

$$\frac{C \cdot N_u \cdot \sqrt{E^2 \cdot \left(A^2 - B \cdot A + N_u^2\right)^2} \cdot \left(A^2 + N_u^2\right)}{E \cdot \left(A^2 - B \cdot A + N_u^2\right) \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 0, 0, 4, 5:

$$\frac{\left(N_u^2 + 1\right) \cdot \sqrt{D^2 \cdot E^2 \cdot N_u^4}}{D \cdot E \cdot N_u \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 0, 4, 5:

$$\frac{N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{D^2 \cdot E^2 \cdot \left(A^2 - A + N_u^2\right)^2}}{D \cdot E \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2} \cdot \left(A^2 - A + N_u^2\right)}$$

0, 2, 0, 4, 5:

$$\frac{N_u \cdot \left(N_u^2 + 1\right) \cdot \sqrt{D^2 \cdot E^2 \cdot \left(N_u^2 - B + 1\right)^2}}{D \cdot E \cdot \sqrt{N_u^2 \cdot \left(N_u^2 + 1\right)^2} \cdot \left(N_u^2 - B + 1\right)}$$

1, 2, 0, 4, 5:

$$\frac{N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{D^2 \cdot E^2 \cdot \left(A^2 - B \cdot A + N_u^2\right)^2}}{D \cdot E \cdot \sqrt{N_u^2 \cdot \left(A^2 + N_u^2\right)^2} \cdot \left(A^2 - B \cdot A + N_u^2\right)}$$

0, 0, 3, 4, 5:

$$\frac{C \cdot \left(N_u^2 + 1\right) \cdot \sqrt{D^2 \cdot E^2 \cdot N_u^4}}{D \cdot E \cdot N_u \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0, 3, 4, 5:

$$\frac{C \cdot N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{D^2 \cdot E^2 \cdot \left(A^2 - A + N_u^2\right)^2}}{D \cdot E \cdot \left(A^2 - A + N_u^2\right) \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

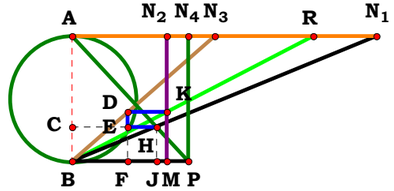
0, 2, 3, 4, 5:

$$\frac{C \cdot N_u \cdot \left(N_u^2 + 1\right) \cdot \sqrt{D^2 \cdot E^2 \cdot \left(N_u^2 - B + 1\right)^2}}{D \cdot E \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(N_u^2 + 1\right)^2} \cdot \left(N_u^2 - B + 1\right)}$$

1, 2, 3, 4, 5:

$$\frac{C \cdot N_u \cdot \left(A^2 + N_u^2\right) \cdot \sqrt{D^2 \cdot E^2 \cdot \left(A^2 - B \cdot A + N_u^2\right)^2}}{D \cdot E \cdot \left(A^2 - B \cdot A + N_u^2\right) \cdot \sqrt{C^2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)^2}}$$

2SMT7R6



$N_1 = 2.43434$
$N_2 = 0.75758$
$N_3 = 1.14141$
$N_4 = 0.92929$
$R = 1.93380$

Unit. $AB := 1$ **Given.** $N_1 := 2.43434$ $N_2 := .75758$ $N_3 := 1.14141$ $N_4 := .92929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2 \cdot \sqrt{A \cdot D} \cdot (A + D)}{A \cdot B \cdot C \cdot D} = 1.933803$$

$$Num := \frac{N_u^2 \cdot \sqrt{A \cdot D} \cdot (A + D)}{\sqrt{\left[N_u^2 \cdot \sqrt{A \cdot D} \cdot (A + D)\right]^2}}$$

$$Den := \frac{A \cdot B \cdot C \cdot D}{\sqrt{(A \cdot B \cdot C \cdot D)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \sqrt{A \cdot D} \cdot (A + D) \cdot \sqrt{A^2 \cdot B^2 \cdot C^2 \cdot D^2}}{A \cdot B \cdot C \cdot D \cdot \sqrt{A \cdot D \cdot N_u^4 \cdot (A + D)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $$\frac{N_u^{\,2}}{\sqrt{N_u^{\,4}}}$$

1, 0, 0, 0: $$\frac{N_u^{\,2}\cdot(A+1)\cdot\sqrt{A^2}}{\sqrt{A}\cdot\sqrt{A\cdot N_u^{\,4}\cdot(A+1)^2}}$$

0, 2, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{B^2}}{B\cdot\sqrt{N_u^{\,4}}}$$

1, 2, 0, 0: $$\frac{N_u^{\,2}\cdot(A+1)\cdot\sqrt{A^2\cdot B^2}}{\sqrt{A}\cdot B\cdot\sqrt{A\cdot N_u^{\,4}\cdot(A+1)^2}}$$

0, 0, 3, 0: $$\frac{N_u^{\,2}\cdot\sqrt{C^2}}{C\cdot\sqrt{N_u^{\,4}}}$$

1, 0, 3, 0: $$\frac{N_u^{\,2}\cdot(A+1)\cdot\sqrt{A^2\cdot C^2}}{\sqrt{A}\cdot C\cdot\sqrt{A\cdot N_u^{\,4}\cdot(A+1)^2}}$$

0, 2, 3, 0: $$\frac{N_u^{\,2}\cdot\sqrt{B^2\cdot C^2}}{B\cdot C\cdot\sqrt{N_u^{\,4}}}$$

1, 2, 3, 0: $$\frac{N_u^{\,2}\cdot(A+1)\cdot\sqrt{A^2\cdot B^2\cdot C^2}}{\sqrt{A}\cdot B\cdot C\cdot\sqrt{A\cdot N_u^{\,4}\cdot(A+1)^2}}$$

0, 0, 0, 4: $$\frac{N_u^{\,2}\cdot(D+1)\cdot\sqrt{D^2}}{\sqrt{D}\cdot\sqrt{D\cdot N_u^{\,4}\cdot(D+1)^2}}$$

1, 0, 0, 4: $$\frac{N_u^{\,2}\cdot\sqrt{A^2\cdot D^2}\cdot\sqrt{A\cdot D}\cdot(A+D)}{A\cdot D\cdot\sqrt{A\cdot D\cdot N_u^{\,4}\cdot(A+D)^2}}$$

0, 2, 0, 4: $$\frac{N_u^{\,2}\cdot(D+1)\cdot\sqrt{B^2\cdot D^2}}{B\cdot\sqrt{D}\cdot\sqrt{D\cdot N_u^{\,4}\cdot(D+1)^2}}$$

1, 2, 0, 4: $$\frac{N_u^{\,2}\cdot\sqrt{A\cdot D}\cdot(A+D)\cdot\sqrt{A^2\cdot B^2\cdot D^2}}{A\cdot B\cdot D\cdot\sqrt{A\cdot D\cdot N_u^{\,4}\cdot(A+D)^2}}$$

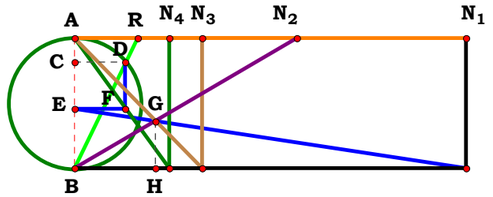
0, 0, 3, 4: $$\frac{N_u^{\,2}\cdot(D+1)\cdot\sqrt{C^2\cdot D^2}}{C\cdot\sqrt{D}\cdot\sqrt{D\cdot N_u^{\,4}\cdot(D+1)^2}}$$

1, 0, 3, 4: $$\frac{N_u^{\,2}\cdot\sqrt{A\cdot D}\cdot(A+D)\cdot\sqrt{A^2\cdot C^2\cdot D^2}}{A\cdot C\cdot D\cdot\sqrt{A\cdot D\cdot N_u^{\,4}\cdot(A+D)^2}}$$

0, 2, 3, 4: $$\frac{N_u^{\,2}\cdot(D+1)\cdot\sqrt{B^2\cdot C^2\cdot D^2}}{B\cdot C\cdot\sqrt{D}\cdot\sqrt{D\cdot N_u^{\,4}\cdot(D+1)^2}}$$

1, 2, 3, 4: $$\frac{N_u^{\,2}\cdot\sqrt{A\cdot D}\cdot(A+D)\cdot\sqrt{A^2\cdot B^2\cdot C^2\cdot D^2}}{A\cdot B\cdot C\cdot D\cdot\sqrt{A\cdot D\cdot N_u^{\,4}\cdot(A+D)^2}}$$

2SMT8R0



$N_1 = 3.00000$
$N_2 = 1.70210$
$N_3 = 0.98040$
$N_4 = 0.72621$
$R = 0.48245$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 1.70210$ $N_3 := .98040$ $N_4 := .72621$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2 \cdot N_u \cdot (A - C)}{D \cdot (A - B - C) - \sqrt{D^2 \cdot (A - B - C)^2 - 4 \cdot N_u^2 \cdot (A - C)^2}} = 0.482453$$

$$Num := \frac{2 \cdot N_u \cdot (A - C)}{\sqrt{\left[2 \cdot N_u \cdot (A - C)\right]^2}}$$

$$Den := \frac{D \cdot (A - B - C) - \sqrt{D^2 \cdot (A - B - C)^2 - 4 \cdot N_u^2 \cdot (A - C)^2}}{\sqrt{\left[D \cdot (A - B - C) - \sqrt{D^2 \cdot (A - B - C)^2 - 4 \cdot N_u^2 \cdot (A - C)^2}\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[\sqrt{D^2 \cdot (B - A + C)^2 - 4 \cdot N_u^2 \cdot (A - C)^2} + D \cdot (B - A + C)\right]^2} \cdot (A - C)}{\sqrt{N_u^2 \cdot (A - C)^2} \cdot \left[A \cdot D - B \cdot D - C \cdot D - \sqrt{D^2 \cdot (B - A + C)^2 - 4 \cdot N_u^2 \cdot (A - C)^2}\right]} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0: $$\frac{N_u\cdot(A-1)\cdot\sqrt{\left[\sqrt{(A-2)^2-4\cdot N_u{}^2\cdot(A-1)^2}-A+2\right]^2}}{\sqrt{N_u{}^2\cdot(A-1)^2}\cdot\left[\sqrt{(A-2)^2-4\cdot N_u{}^2\cdot(A-1)^2}-A+2\right]}$$

0, 2, 0, 0: 0

1, 2, 0, 0: $$\frac{N_u\cdot(A-1)\cdot\sqrt{\left[B-A+\sqrt{(B-A+1)^2-4\cdot N_u{}^2\cdot(A-1)^2}+1\right]^2}}{\sqrt{N_u{}^2\cdot(A-1)^2}\cdot\left[B-A+\sqrt{(B-A+1)^2-4\cdot N_u{}^2\cdot(A-1)^2}+1\right]}$$

0, 0, 3, 0: $$\frac{N_u\cdot(C-1)\cdot\sqrt{\left[C+\sqrt{C^2-4\cdot N_u{}^2\cdot(C-1)^2}\right]^2}}{\left[C+\sqrt{C^2-4\cdot N_u{}^2\cdot(C-1)^2}\right]\cdot\sqrt{N_u{}^2\cdot(C-1)^2}}$$

1, 0, 3, 0: $$\frac{N_u\cdot\sqrt{\left[C-A+\sqrt{(C-A+1)^2-4\cdot N_u{}^2\cdot(A-C)^2}+1\right]^2}\cdot(A-C)}{\sqrt{N_u{}^2\cdot(A-C)^2}\cdot\left[C-A+\sqrt{(C-A+1)^2-4\cdot N_u{}^2\cdot(A-C)^2}+1\right]}$$

0, 2, 3, 0: $$\frac{N_u\cdot(C-1)\cdot\sqrt{\left[B+C+\sqrt{(B+C-1)^2-4\cdot N_u{}^2\cdot(C-1)^2}-1\right]^2}}{\sqrt{N_u{}^2\cdot(C-1)^2}\cdot\left[B+C+\sqrt{(B+C-1)^2-4\cdot N_u{}^2\cdot(C-1)^2}-1\right]}$$

1, 2, 3, 0: $$\frac{N_u\cdot\sqrt{\left[B-A+C+\sqrt{(B-A+C)^2-4\cdot N_u{}^2\cdot(A-C)^2}\right]^2}\cdot(A-C)}{\sqrt{N_u{}^2\cdot(A-C)^2}\cdot\left[B-A+C+\sqrt{(B-A+C)^2-4\cdot N_u{}^2\cdot(A-C)^2}\right]}$$

0, 0, 0, 4: 0

1, 0, 0, 4: $$\frac{N_u\cdot(A-1)\cdot\sqrt{\left[\sqrt{D^2\cdot(A-2)^2-4\cdot N_u{}^2\cdot(A-1)^2}-D\cdot(A-2)\right]^2}}{\sqrt{N_u{}^2\cdot(A-1)^2}\cdot\left[2\cdot D+\sqrt{D^2\cdot(A-2)^2-4\cdot N_u{}^2\cdot(A-1)^2}-A\cdot D\right]}$$

0, 2, 0, 4: 0

1, 2, 0, 4: $$\frac{N_u\cdot(A-1)\cdot\sqrt{\left[D\cdot(B-A+1)+\sqrt{D^2\cdot(B-A+1)^2-4\cdot N_u{}^2\cdot(A-1)^2}\right]^2}}{\sqrt{N_u{}^2\cdot(A-1)^2}\cdot\left[D-A\cdot D+B\cdot D+\sqrt{D^2\cdot(B-A+1)^2-4\cdot N_u{}^2\cdot(A-1)^2}\right]}$$

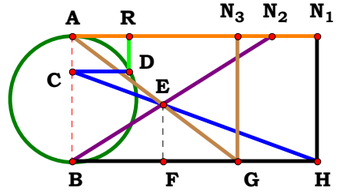
0, 0, 3, 4: $$\frac{N_u\cdot(C-1)\cdot\sqrt{\left[C\cdot D+\sqrt{C^2\cdot D^2-4\cdot N_u{}^2\cdot(C-1)^2}\right]^2}}{\left[C\cdot D+\sqrt{C^2\cdot D^2-4\cdot N_u{}^2\cdot(C-1)^2}\right]\cdot\sqrt{N_u{}^2\cdot(C-1)^2}}$$

1, 0, 3, 4: $$\frac{N_u\cdot\sqrt{\left[\sqrt{D^2\cdot(C-A+1)^2-4\cdot N_u{}^2\cdot(A-C)^2}+D\cdot(C-A+1)\right]^2}\cdot(A-C)}{\sqrt{N_u{}^2\cdot(A-C)^2}\cdot\left[D-A\cdot D+C\cdot D+\sqrt{D^2\cdot(C-A+1)^2-4\cdot N_u{}^2\cdot(A-C)^2}\right]}$$

0, 2, 3, 4: $$\frac{N_u\cdot\sqrt{\left[D\cdot(B+C-1)+\sqrt{D^2\cdot(B+C-1)^2-4\cdot N_u{}^2\cdot(C-1)^2}\right]^2}\cdot(C-1)}{\sqrt{N_u{}^2\cdot(C-1)^2}\cdot\left[\sqrt{D^2\cdot(B+C-1)^2-4\cdot N_u{}^2\cdot(C-1)^2}-D+B\cdot D+C\cdot D\right]}$$

1, 2, 3, 4: $$\frac{N_u\cdot\sqrt{\left[\sqrt{D^2\cdot(B-A+C)^2-4\cdot N_u{}^2\cdot(A-C)^2}+D\cdot(B-A+C)\right]^2}\cdot(A-C)}{\sqrt{N_u{}^2\cdot(A-C)^2}\cdot\left[A\cdot D-B\cdot D-C\cdot D-\sqrt{D^2\cdot(B-A+C)^2-4\cdot N_u{}^2\cdot(A-C)^2}\right]}$$

2SMT8R1



$N_1 = 1.95960$

$N_2 = 1.59596$

$N_3 = 1.32323$

$R = 0.44970$

Unit. $AB := 1$ Given. $N_1 := 1.95960$ $N_2 := 1.59596$ $N_3 := 1.32323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{B}\cdot\sqrt{C-A}}{B-A+C} = 0.449703$$

$$Num := \frac{\sqrt{B}\cdot\sqrt{C-A}}{\sqrt{\left(\sqrt{B}\cdot\sqrt{C-A}\right)^2}}$$

$$Den := \frac{B-A+C}{\sqrt{(B-A+C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B}\cdot\sqrt{(B-A+C)^2}\cdot\sqrt{C-A}}{\sqrt{-B\cdot(A-C)}\cdot(B-A+C)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: 0

1, 0, 0: $-\frac{\sqrt{(A-2)^2}}{A-2}$

0, 2, 0: 0

1, 2, 0: $\frac{\sqrt{B}\cdot\sqrt{1-A}\cdot\sqrt{(B-A+1)^2}}{\sqrt{-B\cdot(A-1)}\cdot(B-A+1)}$

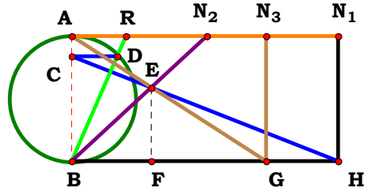
0, 0, 3: $\frac{\sqrt{C^2}}{C}$

1, 0, 3: $\frac{\sqrt{(C-A+1)^2}}{C-A+1}$

0, 2, 3: $\frac{\sqrt{B}\cdot\sqrt{C-1}\cdot\sqrt{(B+C-1)^2}}{\sqrt{B\cdot(C-1)}\cdot(B+C-1)}$

1, 2, 3: $\frac{\sqrt{B}\cdot\sqrt{(B-A+C)^2}\cdot\sqrt{C-A}}{\sqrt{-B\cdot(A-C)}\cdot(B-A+C)}$

2SMT8R2



$N_1 = 2.13131$
$N_2 = 1.08081$
$N_3 = 1.55556$
$R = 0.43324$

Unit. $AB := 1$ **Given.** $N_1 := 2.13131$ $N_2 := 1.08081$ $N_3 := 1.55556$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$\frac{\sqrt{C - A}}{\sqrt{B}} = 0.433236$ $Num := \frac{\sqrt{C - A}}{\sqrt{(\sqrt{C - A})^2}}$ $Den := \frac{\sqrt{B}}{\sqrt{(\sqrt{B})^2}}$ $L := \frac{Num}{Den}$

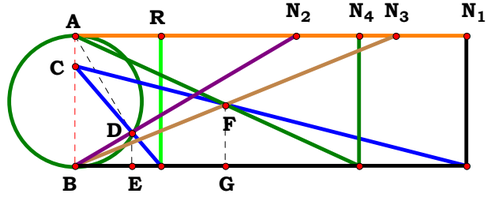
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$1 = 1$

$L - 1 = 0$

2SMT8R4



$N_1 = 3.00000$
$N_2 = 1.69242$
$N_3 = 2.46232$
$N_4 = 2.17907$
$R = 0.66238$

Unit. $AB := 1$ Given. $N_1 := 3$ $N_2 := 1.69242$ $N_3 := 2.46232$

$N_4 := 2.17907$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B \cdot C \cdot N_u}{B^2 \cdot (A - D) + C \cdot {N_u}^2} = 0.662377$$

$$Num := \frac{B \cdot C \cdot N_u}{\sqrt{(B \cdot C \cdot N_u)^2}}$$

$$Den := \frac{B^2 \cdot (A - D) + C \cdot {N_u}^2}{\sqrt{\left[B^2 \cdot (A - D) + C \cdot {N_u}^2\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot C \cdot N_u \cdot \sqrt{\left[(A - D) \cdot B^2 + C \cdot {N_u}^2\right]^2}}{\left(A \cdot B^2 - B^2 \cdot D + C \cdot {N_u}^2\right) \cdot \sqrt{B^2 \cdot C^2 \cdot {N_u}^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:

$$\frac{\sqrt{N_u^{\,4}}}{N_u \cdot \sqrt{N_u^{\,2}}}$$

1, 0, 0, 0:

$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2} + A - 1\right)^2}}{\sqrt{N_u^{\,2}} \cdot \left(N_u^{\,2} + A - 1\right)}$$

0, 2, 0, 0:

$$\frac{B \cdot \sqrt{N_u^{\,4}}}{N_u \cdot \sqrt{B^2 \cdot N_u^{\,2}}}$$

1, 2, 0, 0:

$$\frac{B \cdot N_u \cdot \sqrt{\left[(A - 1) \cdot B^2 + N_u^{\,2}\right]^2}}{\sqrt{B^2 \cdot N_u^{\,2}} \cdot \left(N_u^{\,2} - B^2 + A \cdot B^2\right)}$$

0, 0, 3, 0:

$$\frac{\sqrt{N_u^{\,4}}}{N_u \cdot \sqrt{N_u^{\,2}}}$$

1, 0, 3, 0:

$$\frac{C \cdot N_u \cdot \sqrt{\left(C \cdot N_u^{\,2} + A - 1\right)^2}}{\sqrt{C^2 \cdot N_u^{\,2}} \cdot \left(C \cdot N_u^{\,2} + A - 1\right)}$$

0, 2, 3, 0:

$$\frac{B \cdot \sqrt{C^2 \cdot N_u^{\,4}}}{N_u \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^{\,2}}}$$

1, 2, 3, 0:

$$\frac{B \cdot C \cdot N_u \cdot \sqrt{\left[(A - 1) \cdot B^2 + C \cdot N_u^{\,2}\right]^2}}{\sqrt{B^2 \cdot C^2 \cdot N_u^{\,2}} \cdot \left(A \cdot B^2 - B^2 + C \cdot N_u^{\,2}\right)}$$

0, 0, 0, 4:

$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2} - D + 1\right)^2}}{\sqrt{N_u^{\,2}} \cdot \left(N_u^{\,2} - D + 1\right)}$$

1, 0, 0, 4:

$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2} + A - D\right)^2}}{\sqrt{N_u^{\,2}} \cdot \left(N_u^{\,2} + A - D\right)}$$

0, 2, 0, 4:

$$\frac{B \cdot N_u \cdot \sqrt{\left[N_u^{\,2} - B^2 \cdot (D - 1)\right]^2}}{\sqrt{B^2 \cdot N_u^{\,2}} \cdot \left(B^2 + N_u^{\,2} - B^2 \cdot D\right)}$$

1, 2, 0, 4:

$$\frac{B \cdot N_u \cdot \sqrt{\left[(A - D) \cdot B^2 + N_u^{\,2}\right]^2}}{\sqrt{B^2 \cdot N_u^{\,2}} \cdot \left(N_u^{\,2} + A \cdot B^2 - B^2 \cdot D\right)}$$

0, 0, 3, 4:

$$\frac{C \cdot N_u \cdot \sqrt{\left(C \cdot N_u^{\,2} - D + 1\right)^2}}{\sqrt{C^2 \cdot N_u^{\,2}} \cdot \left(C \cdot N_u^{\,2} - D + 1\right)}$$

1, 0, 3, 4:

$$\frac{C \cdot N_u \cdot \sqrt{\left(C \cdot N_u^{\,2} + A - D\right)^2}}{\sqrt{C^2 \cdot N_u^{\,2}} \cdot \left(C \cdot N_u^{\,2} + A - D\right)}$$

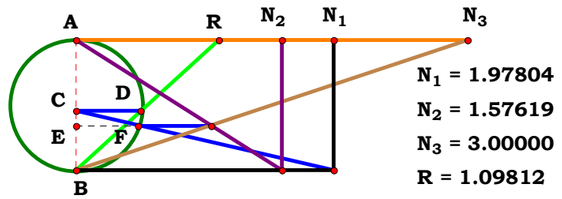
0, 2, 3, 4:

$$\frac{B \cdot C \cdot N_u \cdot \sqrt{\left[B^2 \cdot (D - 1) - C \cdot N_u^{\,2}\right]^2}}{\sqrt{B^2 \cdot C^2 \cdot N_u^{\,2}} \cdot \left(B^2 - B^2 \cdot D + C \cdot N_u^{\,2}\right)}$$

1, 2, 3, 4:

$$\frac{B \cdot C \cdot N_u \cdot \sqrt{\left[(A - D) \cdot B^2 + C \cdot N_u^{\,2}\right]^2}}{\left(A \cdot B^2 - B^2 \cdot D + C \cdot N_u^{\,2}\right) \cdot \sqrt{B^2 \cdot C^2 \cdot N_u^{\,2}}}$$

2SMT8R5



Unit. $AB := 1$ Given. $N_1 := 1.97804$ $N_2 := 1.57619$ $N_3 := 3$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{B\cdot\sqrt{N_u\cdot\left(N_u\cdot\sqrt{B\cdot C}-A\cdot C\right)}}{N_u\cdot(B\cdot C)^{\frac{3}{4}}} = 1.098117$$

$$Num := \frac{B\cdot\sqrt{N_u\cdot\left(N_u\cdot\sqrt{B\cdot C}-A\cdot C\right)}}{\sqrt{\left[B\cdot\sqrt{N_u\cdot\left(N_u\cdot\sqrt{B\cdot C}-A\cdot C\right)}\right]^2}}$$

$$Den := \frac{N_u\cdot(B\cdot C)^{\frac{3}{4}}}{\sqrt{\left[N_u\cdot(B\cdot C)^{\frac{3}{4}}\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B\cdot\sqrt{N_u^{\,2}\cdot(B\cdot C)^{\frac{3}{2}}}\cdot\sqrt{-N_u\cdot\left(A\cdot C-N_u\cdot\sqrt{B\cdot C}\right)}}{3} = 0$$

$$N_u\cdot(B\cdot C)^{\overline{4}}\cdot\sqrt{-B^2\cdot N_u\cdot\left(A\cdot C-N_u\cdot\sqrt{B\cdot C}\right)}$$

For 3 variables there are 8 subsets.

0, 0, 0: $\frac{\sqrt{N_u^{\,2}}}{N_u}$

1, 0, 0: $\frac{\sqrt{N_u^{\,2}}}{N_u}$

0, 2, 0: $\frac{B^{\frac{1}{4}} \cdot \sqrt{N_u \cdot \left(\sqrt{B} \cdot N_u - 1\right)} \cdot \sqrt{B^{\frac{3}{2}} \cdot N_u^{\,2}}}{N_u \cdot \sqrt{B^2 \cdot N_u \cdot \left(\sqrt{B} \cdot N_u - 1\right)}}$

1, 2, 0: $\frac{B^{\frac{1}{4}} \cdot \sqrt{-N_u \cdot \left(A - \sqrt{B} \cdot N_u\right)} \cdot \sqrt{B^{\frac{3}{2}} \cdot N_u^{\,2}}}{N_u \cdot \sqrt{-B^2 \cdot N_u \cdot \left(A - \sqrt{B} \cdot N_u\right)}}$

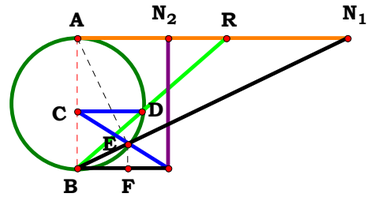
0, 0, 3: $\frac{\sqrt{C^{\frac{3}{2}} \cdot N_u^{\,2}}}{C^{\frac{3}{4}} \cdot N_u}$

1, 0, 3: $\frac{\sqrt{C^{\frac{3}{2}} \cdot N_u^{\,2}}}{C^{\frac{3}{4}} \cdot N_u}$

0, 2, 3: $\frac{B \cdot \sqrt{-N_u \cdot \left(C - N_u \cdot \sqrt{B \cdot C}\right)} \cdot \sqrt{N_u^{\,2} \cdot (B \cdot C)^{\frac{3}{2}}}}{N_u \cdot (B \cdot C)^{\frac{3}{4}} \cdot \sqrt{-B^2 \cdot N_u \cdot \left(C - N_u \cdot \sqrt{B \cdot C}\right)}}$

1, 2, 3: $\frac{B \cdot \sqrt{N_u^{\,2} \cdot (B \cdot C)^{\frac{3}{2}}} \cdot \sqrt{-N_u \cdot \left(A \cdot C - N_u \cdot \sqrt{B \cdot C}\right)}}{N_u \cdot (B \cdot C)^{\frac{3}{4}} \cdot \sqrt{-B^2 \cdot N_u \cdot \left(A \cdot C - N_u \cdot \sqrt{B \cdot C}\right)}}$

2SMT8R6



$N_1 = 2.07016$

$N_2 = 0.69478$

$R = 1.14280$

Unit. $AB := 1$ Given. $N_1 := 2.07016$ $N_2 := .69478$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$\frac{\sqrt{N_u^2 - A \cdot B}}{A} = 1.142791$ $Num := \frac{\sqrt{N_u^2 - A \cdot B}}{\sqrt{\left(\sqrt{N_u^2 - A \cdot B}\right)^2}}$ $Den := \frac{A}{\sqrt{(A)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$\frac{\sqrt{A^2}}{A} = 1$

$L - \frac{\sqrt{A^2}}{A} = 0$

For 2 variables there are 4 subsets.

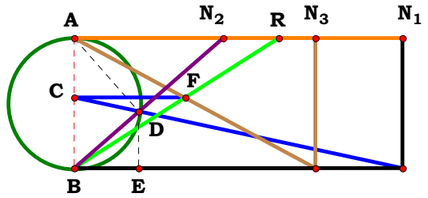
0, 0: **1**

1, 0: $\frac{\sqrt{A^2}}{A}$

0, 2: **1**

1, 2: $\frac{\sqrt{A^2}}{A}$

2SMT8R7



$N_1 = 2.51571$
$N_2 = 1.14033$
$N_3 = 1.85212$
$R = 1.56887$

Unit. $AB := 1$ Given. $N_1 := 2.5157$ $N_2 := 1.14033$ $N_3 := 1.85212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u^3 - A \cdot B \cdot N_u}{B^2 \cdot C} = 1.56887$$

$$Num := \frac{N_u^3 - A \cdot B \cdot N_u}{\sqrt{\left(N_u^3 - A \cdot B \cdot N_u\right)^2}}$$

$$Den := \frac{B^2 \cdot C}{\sqrt{\left(B^2 \cdot C\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^4 \cdot C^2} \cdot N_u \cdot \left(N_u^2 - A \cdot B\right)}{B^2 \cdot C \cdot \sqrt{\left(N_u^3 - A \cdot B \cdot N_u\right)^2}} = 0$$

For 2 variables there are 4 subsets.

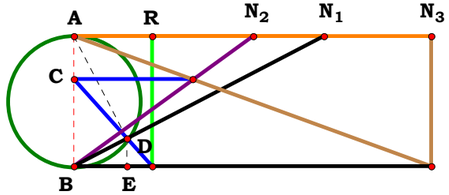
0, 0: $$\frac{N_u \cdot \left(N_u{}^2 - 1\right)}{\sqrt{\left(N_u - N_u{}^3\right)^2}}$$

1, 0: $$-\frac{N_u \cdot \left(A - N_u{}^2\right)}{\sqrt{\left(N_u{}^3 - A \cdot N_u\right)^2}}$$

0, 2: $$-\frac{N_u \cdot \sqrt{B^4 \cdot C^2} \cdot \left(B - N_u{}^2\right)}{B^2 \cdot C \cdot \sqrt{\left(N_u{}^3 - B \cdot N_u\right)^2}}$$

1, 2: $$\frac{\sqrt{B^4 \cdot C^2} \cdot N_u \cdot \left(N_u{}^2 - A \cdot B\right)}{B^2 \cdot C \cdot \sqrt{\left(N_u{}^3 - A \cdot B \cdot N_u\right)^2}}$$

2SMT8R8



$N_1 = 1.91519$
$N_2 = 1.37279$
$N_3 = 2.74321$
$R = 0.60463$

Unit. $AB := 1$ **Given.** $N_1 := 1.91519$ $N_2 := 1.37279$ $N_3 := 2.74321$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A \cdot B \cdot N_u}{B \cdot N_u^2 - A^2 \cdot C} = 0.604634$$

$$Num := \frac{A \cdot B \cdot N_u}{\sqrt{(A \cdot B \cdot N_u)^2}}$$

$$Den := \frac{B \cdot N_u^2 - A^2 \cdot C}{\sqrt{(B \cdot N_u^2 - A^2 \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot B \cdot N_u \cdot \sqrt{(A^2 \cdot C - B \cdot N_u^2)^2}}{(B \cdot N_u^2 - A^2 \cdot C) \cdot \sqrt{A^2 \cdot B^2 \cdot N_u^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u \cdot \sqrt{\left(N_u^{\,2} - 1\right)^2}}{\sqrt{N_u^{\,2}} \cdot \left(N_u^{\,2} - 1\right)}$$

0, 0, 3: $$-\frac{N_u \cdot \sqrt{\left(C - N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,2}} \cdot \left(C - N_u^{\,2}\right)}$$

1, 0, 0: $$-\frac{A \cdot N_u \cdot \sqrt{\left(A^2 - N_u^{\,2}\right)^2}}{\sqrt{A^2 \cdot N_u^{\,2}} \cdot \left(A^2 - N_u^{\,2}\right)}$$

1, 0, 3: $$\frac{A \cdot N_u \cdot \sqrt{\left(N_u^{\,2} - A^2 \cdot C\right)^2}}{\left(N_u^{\,2} - A^2 \cdot C\right) \cdot \sqrt{A^2 \cdot N_u^{\,2}}}$$

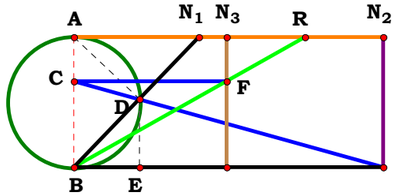
0, 2, 0: $$\frac{B \cdot N_u \cdot \sqrt{\left(B \cdot N_u^{\,2} - 1\right)^2}}{\left(B \cdot N_u^{\,2} - 1\right) \cdot \sqrt{B^2 \cdot N_u^{\,2}}}$$

0, 2, 3: $$-\frac{B \cdot N_u \cdot \sqrt{\left(C - B \cdot N_u^{\,2}\right)^2}}{\sqrt{B^2 \cdot N_u^{\,2}} \cdot \left(C - B \cdot N_u^{\,2}\right)}$$

1, 2, 0: $$-\frac{A \cdot B \cdot N_u \cdot \sqrt{\left(A^2 - B \cdot N_u^{\,2}\right)^2}}{\left(A^2 - B \cdot N_u^{\,2}\right) \cdot \sqrt{A^2 \cdot B^2 \cdot N_u^{\,2}}}$$

1, 2, 3: $$\frac{A \cdot B \cdot N_u \cdot \sqrt{\left(A^2 \cdot C - B \cdot N_u^{\,2}\right)^2}}{\left(B \cdot N_u^{\,2} - A^2 \cdot C\right) \cdot \sqrt{A^2 \cdot B^2 \cdot N_u^{\,2}}}$$

2SMT8R9



$N_1 = 0.95630$
$N_2 = 2.37042$
$N_3 = 1.17412$
$R = 1.77418$

Unit. $AB := 1$ Given. $N_1 := .95630$ $N_2 := 2.37042$ $N_3 := 1.17412$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - B \cdot A + N_u^2\right)}{A^2 \cdot C} = 1.774188$$

$$Num := \frac{N_u \cdot \left(A^2 - B \cdot A + N_u^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 - B \cdot A + N_u^2\right)\right]^2}}$$

$$Den := \frac{A^2 \cdot C}{\sqrt{\left(A^2 \cdot C\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^4 \cdot C^2} \cdot \left(A^2 - B \cdot A + N_u^2\right)}{A^2 \cdot C \cdot \sqrt{N_u^2 \cdot \left(A^2 - B \cdot A + N_u^2\right)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u^{\,3}}{\sqrt{N_u^{\,6}}}$$

1, 0, 0: $$\frac{N_u \cdot \sqrt{A^4} \cdot \left(A^2 - A + N_u^{\,2}\right)}{A^2 \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - A + N_u^{\,2}\right)^2}}$$

0, 2, 0: $$\frac{N_u \cdot \left(N_u^{\,2} - B + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - B + 1\right)^2}}$$

1, 2, 0: $$\frac{N_u \cdot \sqrt{A^4} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}{A^2 \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)^2}}$$

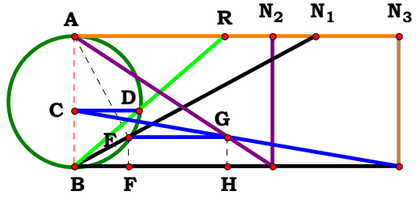
0, 0, 3: $$\frac{N_u^{\,3} \cdot \sqrt{C^2}}{C \cdot \sqrt{N_u^{\,6}}}$$

1, 0, 3: $$\frac{N_u \cdot \sqrt{A^4 \cdot C^2} \cdot \left(A^2 - A + N_u^{\,2}\right)}{A^2 \cdot C \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - A + N_u^{\,2}\right)^2}}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{C^2} \cdot \left(N_u^{\,2} - B + 1\right)}{C \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - B + 1\right)^2}}$$

1, 2, 3: $$\frac{N_u \cdot \sqrt{A^4 \cdot C^2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)}{A^2 \cdot C \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - B \cdot A + N_u^{\,2}\right)^2}}$$

2SMT8R10



$N_1 = 1.84739$
$N_2 = 1.51808$
$N_3 = 2.49138$
$R = 1.15469$

Unit. $AB := 1$ **Given.** $N_1 := 1.84739$ $N_2 := 1.51808$ $N_3 := 2.49138$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \sqrt{B - C}}{A \cdot \sqrt{B}} = 1.154681$$

$$Num := \frac{N_u \cdot \sqrt{B - C}}{\sqrt{\left(N_u \cdot \sqrt{B - C}\right)^2}}$$

$$Den := \frac{A \cdot \sqrt{B}}{\sqrt{\left(A \cdot \sqrt{B}\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B - C} \cdot \sqrt{A^2 \cdot B}}{A \cdot \sqrt{B} \cdot \sqrt{N_u{}^2 \cdot (B - C)}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: 0

0, 0, 3: $\frac{N_u \cdot \sqrt{1-C}}{\sqrt{-N_u^{\,2} \cdot (C-1)}}$

1, 0, 0: 0

1, 0, 3: $\frac{N_u \cdot \sqrt{1-C} \cdot \sqrt{A^2}}{A \cdot \sqrt{-N_u^{\,2} \cdot (C-1)}}$

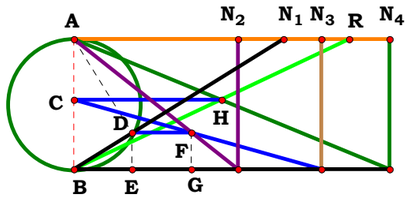
0, 2, 0: $\frac{N_u \cdot \sqrt{B-1}}{\sqrt{N_u^{\,2} \cdot (B-1)}}$

0, 2, 3: $\frac{N_u \cdot \sqrt{B-C}}{\sqrt{N_u^{\,2} \cdot (B-C)}}$

1, 2, 0: $\frac{N_u \cdot \sqrt{B-1} \cdot \sqrt{A^2 \cdot B}}{A \cdot \sqrt{B} \cdot \sqrt{N_u^{\,2} \cdot (B-1)}}$

1, 2, 3: $\frac{N_u \cdot \sqrt{B-C} \cdot \sqrt{A^2 \cdot B}}{A \cdot \sqrt{B} \cdot \sqrt{N_u^{\,2} \cdot (B-C)}}$

2SMT8R11



$N_1 = 1.60525$
$N_2 = 1.25656$
$N_3 = 1.90055$
$N_4 = 2.42122$
$R = 2.11406$

Unit. $AB := 1$ Given. $N_1 := 1.60525$ $N_2 := 1.25656$ $N_3 := 1.90055$ $N_4 := 2.42122$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^{3} \cdot (B - C)}{A^2 \cdot B \cdot D} = 2.11407$$

$$Num := \frac{N_u^{3} \cdot (B - C)}{\sqrt{\left[N_u^{3} \cdot (B - C)\right]^2}}$$

$$Den := \frac{A^2 \cdot B \cdot D}{\sqrt{\left(A^2 \cdot B \cdot D\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^{3} \cdot (B - C) \cdot \sqrt{A^4 \cdot B^2 \cdot D^2}}{A^2 \cdot B \cdot D \cdot \sqrt{N_u^{6} \cdot (B - C)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

0, 0, 0, 4: 0

1, 0, 0, 0: 0

1, 0, 0, 4: 0

0, 2, 0, 0: $\frac{N_u^3 \cdot (B-1) \cdot \sqrt{B^2}}{B \cdot \sqrt{N_u^6 \cdot (B-1)^2}}$

0, 2, 0, 4: $\frac{N_u^3 \cdot (B-1) \cdot \sqrt{B^2 \cdot D^2}}{B \cdot D \cdot \sqrt{N_u^6 \cdot (B-1)^2}}$

1, 2, 0, 0: $\frac{N_u^3 \cdot (B-1) \cdot \sqrt{A^4 \cdot B^2}}{A^2 \cdot B \cdot \sqrt{N_u^6 \cdot (B-1)^2}}$

1, 2, 0, 4: $\frac{N_u^3 \cdot (B-1) \cdot \sqrt{A^4 \cdot B^2 \cdot D^2}}{A^2 \cdot B \cdot D \cdot \sqrt{N_u^6 \cdot (B-1)^2}}$

0, 0, 3, 0: $-\frac{N_u^3 \cdot (C-1)}{\sqrt{N_u^6 \cdot (C-1)^2}}$

0, 0, 3, 4: $-\frac{N_u^3 \cdot (C-1) \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^6 \cdot (C-1)^2}}$

1, 0, 3, 0: $-\frac{N_u^3 \cdot (C-1) \cdot \sqrt{A^4}}{A^2 \cdot \sqrt{N_u^6 \cdot (C-1)^2}}$

1, 0, 3, 4: $-\frac{N_u^3 \cdot (C-1) \cdot \sqrt{A^4 \cdot D^2}}{A^2 \cdot D \cdot \sqrt{N_u^6 \cdot (C-1)^2}}$

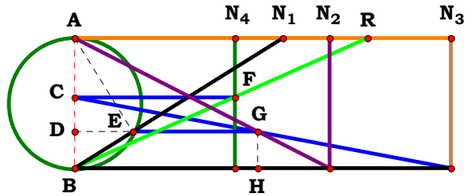
0, 2, 3, 0: $\frac{N_u^3 \cdot \sqrt{B^2} \cdot (B-C)}{B \cdot \sqrt{N_u^6 \cdot (B-C)^2}}$

0, 2, 3, 4: $\frac{N_u^3 \cdot \sqrt{B^2 \cdot D^2} \cdot (B-C)}{B \cdot D \cdot \sqrt{N_u^6 \cdot (B-C)^2}}$

1, 2, 3, 0: $\frac{N_u^3 \cdot \sqrt{A^4 \cdot B^2} \cdot (B-C)}{A^2 \cdot B \cdot \sqrt{N_u^6 \cdot (B-C)^2}}$

1, 2, 3, 4: $\frac{N_u^3 \cdot (B-C) \cdot \sqrt{A^4 \cdot B^2 \cdot D^2}}{A^2 \cdot B \cdot D \cdot \sqrt{N_u^6 \cdot (B-C)^2}}$

2SMT8R12



$N_1 = 1.59556$
$N_2 = 1.95394$
$N_3 = 2.88850$
$N_4 = 1.22987$
$R = 2.24289$

Unit. $AB := 1$ Given. $N_1 := 1.59556$ $N_2 := 1.95394$ $N_3 := 2.88850$

$N_4 := 1.22987$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^3 \cdot (B - C) + A^2 \cdot B \cdot N_u}{A^2 \cdot B \cdot D} = 2.242895$$

$$Num := \frac{N_u^3 \cdot (B - C) + A^2 \cdot B \cdot N_u}{\sqrt{\left[N_u^3 \cdot (B - C) + A^2 \cdot B \cdot N_u\right]^2}}$$

$$Den := \frac{A^2 \cdot B \cdot D}{\sqrt{\left(A^2 \cdot B \cdot D\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(A^2 \cdot B + B \cdot N_u^2 - C \cdot N_u^2\right) \cdot \sqrt{A^4 \cdot B^2 \cdot D^2}}{A^2 \cdot B \cdot D \cdot \sqrt{\left[B \cdot A^2 \cdot N_u + (B - C) \cdot N_u^3\right]^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0, 0: $\frac{N_u \cdot \sqrt{A^4}}{\sqrt{A^4 \cdot N_u^2}}$

0, 2, 0, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot \left(B - N_u^2 + B \cdot N_u^2\right)}{B \cdot \sqrt{\left[(B-1) \cdot N_u^3 + B \cdot N_u\right]^2}}$

1, 2, 0, 0: $\frac{N_u \cdot \sqrt{A^4 \cdot B^2} \cdot \left(A^2 \cdot B - N_u^2 + B \cdot N_u^2\right)}{A^2 \cdot B \cdot \sqrt{\left[B \cdot A^2 \cdot N_u + (B-1) \cdot N_u^3\right]^2}}$

0, 0, 3, 0: $\frac{N_u \cdot \left(N_u^2 - C \cdot N_u^2 + 1\right)}{\sqrt{\left[N_u - N_u^3 \cdot (C-1)\right]^2}}$

1, 0, 3, 0: $\frac{N_u \cdot \sqrt{A^4} \cdot \left(A^2 + N_u^2 - C \cdot N_u^2\right)}{A^2 \cdot \sqrt{\left[N_u^3 \cdot (C-1) - A^2 \cdot N_u\right]^2}}$

0, 2, 3, 0: $\frac{N_u \cdot \sqrt{B^2} \cdot \left(B + B \cdot N_u^2 - C \cdot N_u^2\right)}{B \cdot \sqrt{\left[(B-C) \cdot N_u^3 + B \cdot N_u\right]^2}}$

1, 2, 3, 0: $\frac{N_u \cdot \sqrt{A^4 \cdot B^2} \cdot \left(A^2 \cdot B + B \cdot N_u^2 - C \cdot N_u^2\right)}{A^2 \cdot B \cdot \sqrt{\left[B \cdot A^2 \cdot N_u + (B-C) \cdot N_u^3\right]^2}}$

0, 0, 0, 4: $\frac{N_u \cdot \sqrt{D^2}}{D \cdot \sqrt{N_u^2}}$

1, 0, 0, 4: $\frac{N_u \cdot \sqrt{A^4 \cdot D^2}}{D \cdot \sqrt{A^4 \cdot N_u^2}}$

0, 2, 0, 4: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot \left(B - N_u^2 + B \cdot N_u^2\right)}{B \cdot D \cdot \sqrt{\left[(B-1) \cdot N_u^3 + B \cdot N_u\right]^2}}$

1, 2, 0, 4: $\frac{N_u \cdot \left(A^2 \cdot B - N_u^2 + B \cdot N_u^2\right) \cdot \sqrt{A^4 \cdot B^2 \cdot D^2}}{A^2 \cdot B \cdot D \cdot \sqrt{\left[B \cdot A^2 \cdot N_u + (B-1) \cdot N_u^3\right]^2}}$

0, 0, 3, 4: $\frac{N_u \cdot \sqrt{D^2} \cdot \left(N_u^2 - C \cdot N_u^2 + 1\right)}{D \cdot \sqrt{\left[N_u - N_u^3 \cdot (C-1)\right]^2}}$

1, 0, 3, 4: $\frac{N_u \cdot \sqrt{A^4 \cdot D^2} \cdot \left(A^2 + N_u^2 - C \cdot N_u^2\right)}{A^2 \cdot D \cdot \sqrt{\left[N_u^3 \cdot (C-1) - A^2 \cdot N_u\right]^2}}$

0, 2, 3, 4: $\frac{N_u \cdot \sqrt{B^2 \cdot D^2} \cdot \left(B + B \cdot N_u^2 - C \cdot N_u^2\right)}{B \cdot D \cdot \sqrt{\left[(B-C) \cdot N_u^3 + B \cdot N_u\right]^2}}$

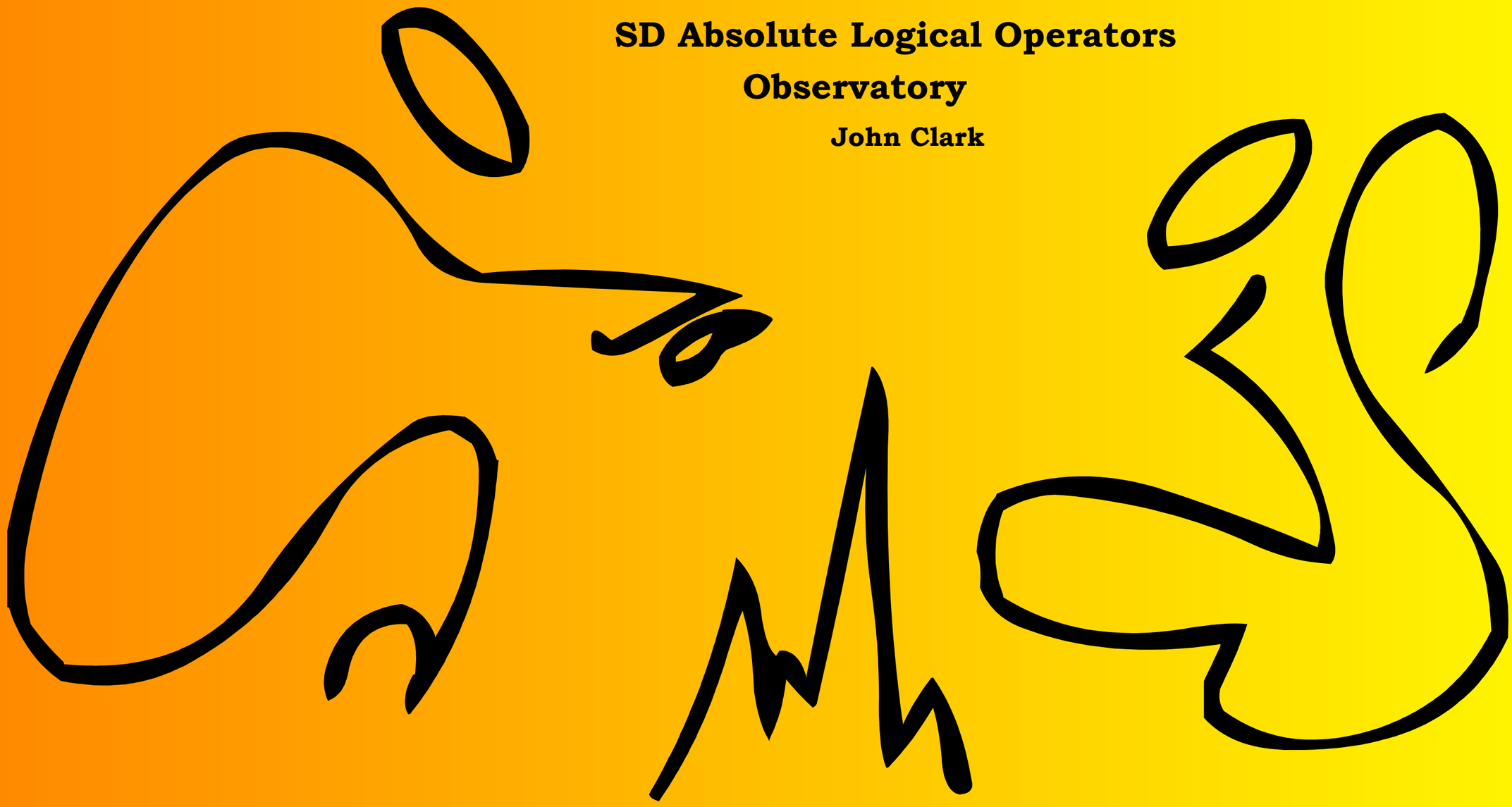
1, 2, 3, 4: $\frac{N_u \cdot \left(A^2 \cdot B + B \cdot N_u^2 - C \cdot N_u^2\right) \cdot \sqrt{A^4 \cdot B^2 \cdot D^2}}{A^2 \cdot B \cdot D \cdot \sqrt{\left[B \cdot A^2 \cdot N_u + (B-C) \cdot N_u^3\right]^2}}$

Basic Analog Grammar

SD Absolute Logical Operators

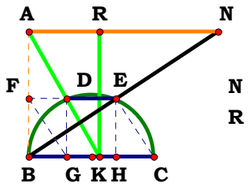
Observatory

John Clark



John 312

3OBT1R0



N = 1.51515
R = 0.56163

Unit. $AB := 1$ **Given.** $N := 1.51515$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A^2}{A^2 - A \cdot N_u + N_u^2} = 0.561631$$

$$Num := \frac{A^2}{\sqrt{\left(A^2\right)^2}}$$

$$Den := \frac{A^2 - A \cdot N_u + N_u^2}{\sqrt{\left(A^2 - A \cdot N_u + N_u^2\right)^2}}$$

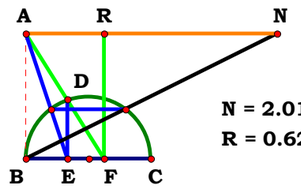
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^2 \cdot \sqrt{\left(A^2 - A \cdot N_u + N_u^2\right)^2}}{\sqrt{A^4} \cdot \left(A^2 - A \cdot N_u + N_u^2\right)} = 0$$

3OBT1R1



N = 2.01010
R = 0.62287

Unit. $AB := 1$ Given. $N := 2.01010$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A^2}{A^2 + N_u \cdot (N_u - A) - A \cdot \sqrt{N_u \cdot (N_u - A)}} = 0.622867$$

$$Num := \frac{A^2}{\sqrt{(A^2)^2}}$$

$$Den := \frac{A^2 + N_u \cdot (N_u - A) - A \cdot \sqrt{N_u \cdot (N_u - A)}}{\sqrt{\left[A^2 + N_u \cdot (N_u - A) - A \cdot \sqrt{N_u \cdot (N_u - A)}\right]^2}}$$

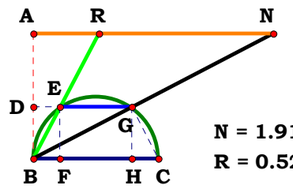
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^2 \cdot \sqrt{\left[N_u \cdot (A - N_u) - A^2 + A \cdot \sqrt{-N_u \cdot (A - N_u)}\right]^2}}{\sqrt{A^4} \cdot \left[A^2 + {N_u}^2 - A \cdot N_u - A \cdot \sqrt{-N_u \cdot (A - N_u)}\right]} = 0$$

3OBT1R2



N = 1.91919
R = 0.52105

Unit. $AB := 1$ **Given.** $N := 1.91919$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$\frac{A}{N_u} = 0.521053$ $Num := \frac{A}{\sqrt{(A)^2}}$ $Den := \frac{N_u}{\sqrt{(N_u)^2}}$ $L := \frac{Num}{Den}$

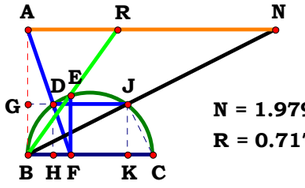
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{A \cdot \sqrt{N_u{}^2}}{N_u \cdot \sqrt{A^2}} = 1$$

$$L - \frac{A \cdot \sqrt{N_u{}^2}}{N_u \cdot \sqrt{A^2}} = 0$$

3OBT1R3



N = 1.97980
R = 0.71799

Unit. $AB := 1$ Given. $N := 1.97980$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A}{\sqrt{N_u \cdot (N_u - A)}} = 0.717994$$

$$Num := \frac{A}{\sqrt{(A)^2}}$$

$$Den := \frac{\sqrt{N_u \cdot (N_u - A)}}{\sqrt{\left[\sqrt{N_u \cdot (N_u - A)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

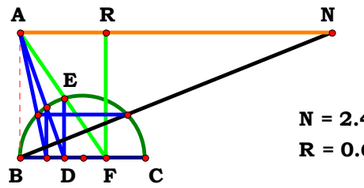
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{Num}{Den} = 1$$

$$L - \frac{A}{\sqrt{A^2}} = 0$$

3OBT1R4



N = 2.49495
R = 0.68613

Unit. $AB := 1$ Given. $N := 2.49495$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A^2}{A^2 - A\cdot\sqrt{N_u\cdot(N_u - A)} - A\cdot\sqrt{N_u\cdot(N_u - A)} + N_u\cdot(N_u - A) - A\cdot\sqrt{N_u\cdot(N_u - A)}} = 0.68613 \qquad Num := \frac{A^2}{\sqrt{(A^2)^2}}$$

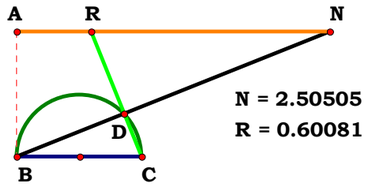
$$Den := \frac{A^2 - A\cdot\sqrt{N_u\cdot(N_u - A)} - A\cdot\sqrt{N_u\cdot(N_u - A)} + N_u\cdot(N_u - A) - A\cdot\sqrt{N_u\cdot(N_u - A)}}{\sqrt{\left[A^2 - A\cdot\sqrt{N_u\cdot(N_u - A)} - A\cdot\sqrt{N_u\cdot(N_u - A)} + N_u\cdot(N_u - A) - A\cdot\sqrt{N_u\cdot(N_u - A)}\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

Num = 1 Den = 1 L = 1

$$L - \frac{A^2\cdot\sqrt{\left[A\cdot\sqrt{-N_u\cdot(A - N_u)} - A\cdot\sqrt{-N_u\cdot(A - N_u)} - A^2 + N_u\cdot(A - N_u) + A\cdot\sqrt{-N_u\cdot(A - N_u)}\right]^2}}{\sqrt{A^4}\cdot\left[A^2 + {N_u}^2 - A\cdot N_u - A\cdot\sqrt{-N_u\cdot(A - N_u)} - A\cdot\sqrt{-N_u\cdot(A - N_u)} - A\cdot\sqrt{-N_u\cdot(A - N_u)}\right]} = 0$$

3OBT1R5



Unit. $AB := 1$ **Given.** $N := 2.50505$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

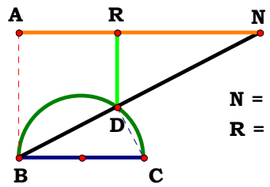
$\frac{N_u - A}{N_u} = 0.600806$ $Num := \frac{N_u - A}{\sqrt{(N_u - A)^2}}$ $Den := \frac{N_u}{\sqrt{(N_u)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{\sqrt{N_u{}^2} \cdot (N_u - A)}{N_u \cdot \sqrt{(A - N_u)^2}} = 0$

3OBT1R6



N = 1.92929
R = 0.78823

Unit. $AB := 1$ Given. $N := 1.92929$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

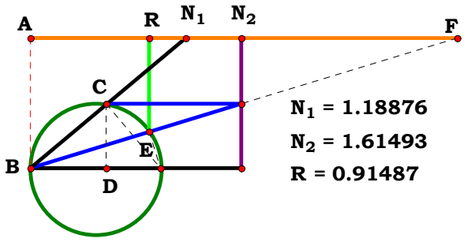
$\frac{N_u^2}{A^2 + N_u^2} = 0.788232$ $Num := \frac{N_u^2}{\sqrt{\left(N_u^2\right)^2}}$ $Den := \frac{A^2 + N_u^2}{\sqrt{\left(A^2 + N_u^2\right)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{N_u^2 \cdot \sqrt{\left(A^2 + N_u^2\right)^2}}{\sqrt{N_u^4} \cdot \left(A^2 + N_u^2\right)} = 0$

3OBT1R7



Unit. $AB := 1$ **Given.** $N_1 := 1.18876$ $N_2 := 1.61493$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{\left(A^2 + N_u{}^2\right)^2}{A^4 + A^2 \cdot B^2 + N_u{}^2 \cdot \left(2 \cdot A^2 + N_u{}^2\right)} = 0.914872$$

$$Num := \frac{\left(A^2 + N_u{}^2\right)^2}{\sqrt{\left[\left(A^2 + N_u{}^2\right)^2\right]^2}}$$

$$Den := \frac{A^4 + A^2 \cdot B^2 + N_u{}^2 \cdot \left(2 \cdot A^2 + N_u{}^2\right)}{\sqrt{\left[A^4 + A^2 \cdot B^2 + N_u{}^2 \cdot \left(2 \cdot A^2 + N_u{}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{\left(A^2 + N_u{}^2\right)^2 \cdot \sqrt{\left[N_u{}^2 \cdot \left(2 \cdot A^2 + N_u{}^2\right) + A^4 + A^2 \cdot B^2\right]^2}}{\sqrt{\left(A^2 + N_u{}^2\right)^4} \cdot \left(A^4 + A^2 \cdot B^2 + 2 \cdot A^2 \cdot N_u{}^2 + N_u{}^4\right)} = 0$$

For 2 variables there are 4 subsets.

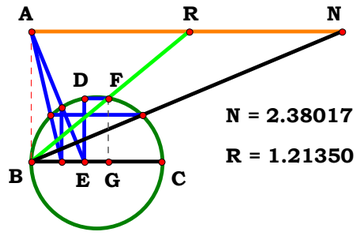
0, 0: $$\frac{\left(N_u^{\,2}+1\right)^2\cdot\sqrt{\left[N_u^{\,2}\cdot\left(N_u^{\,2}+2\right)+2\right]^2}}{\sqrt{\left(N_u^{\,2}+1\right)^4}\cdot\left(N_u^{\,4}+2\cdot N_u^{\,2}+2\right)}$$

1, 0: $$\frac{\sqrt{\left[N_u^{\,2}\cdot\left(2\cdot A^2+N_u^{\,2}\right)+A^2+A^4\right]^2}\cdot\left(A^2+N_u^{\,2}\right)^2}{\sqrt{\left(A^2+N_u^{\,2}\right)^4}\cdot\left(A^4+2\cdot A^2\cdot N_u^{\,2}+A^2+N_u^{\,4}\right)}$$

0, 2: $$\frac{\sqrt{\left[B^2+N_u^{\,2}\cdot\left(N_u^{\,2}+2\right)+1\right]^2}\cdot\left(N_u^{\,2}+1\right)^2}{\sqrt{\left(N_u^{\,2}+1\right)^4}\cdot\left(B^2+N_u^{\,4}+2\cdot N_u^{\,2}+1\right)}$$

1, 2: $$\frac{\left(A^2+N_u^{\,2}\right)^2\cdot\sqrt{\left[N_u^{\,2}\cdot\left(2\cdot A^2+N_u^{\,2}\right)+A^4+A^2\cdot B^2\right]^2}}{\sqrt{\left(A^2+N_u^{\,2}\right)^4}\cdot\left(A^4+A^2\cdot B^2+2\cdot A^2\cdot N_u^{\,2}+N_u^{\,4}\right)}$$

3OBT1R8



N = 2.38017

R = 1.21350

Unit. $AB := 1$ Given. $N := 2.38017$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{\sqrt{N_u^2 - A \cdot N_u - A \cdot \sqrt{N_u^2 - A \cdot N_u}}}{A} = 1.213496$$

$$Num := \frac{\sqrt{N_u^2 - A \cdot N_u - A \cdot \sqrt{N_u^2 - A \cdot N_u}}}{\sqrt{\left(\sqrt{N_u^2 - A \cdot N_u - A \cdot \sqrt{N_u^2 - A \cdot N_u}}\right)^2}}$$

$$Den := \frac{A}{\sqrt{(A)^2}}$$

$$L := \frac{Num}{Den}$$

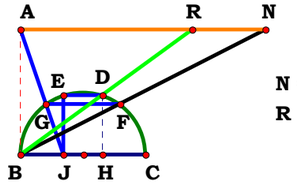
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{A^2}}{A} = 1$$

$$L - \frac{\sqrt{A^2}}{A} = 0$$

3OBT1R9



N = 1.95960
R = 1.37128

Unit. $AB := 1$ **Given.** $N := 1.95960$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$\frac{\sqrt{N_u \cdot (N_u - A)}}{A} = 1.371289$ $Num := \frac{\sqrt{N_u \cdot (N_u - A)}}{\sqrt{\left[\sqrt{N_u \cdot (N_u - A)}\right]^2}}$ $Den := \frac{A}{\sqrt{(A)^2}}$ $L := \frac{Num}{Den}$

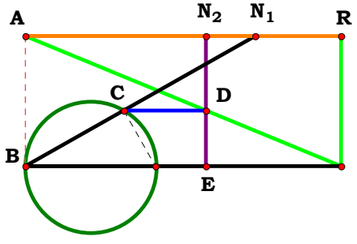
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$\frac{\sqrt{A^2}}{A} = 1$

$L - \frac{\sqrt{A^2}}{A} = 0$

3OBT1R10



$N_1 = 1.76022$

$N_2 = 1.38247$

$R = 2.42323$

Unit. $AB := 1$ **Given.** $N_1 := 1.76022$ $N_2 := 1.38247$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u^{\,2}\right)}{B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)} = 2.423227$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u^{\,2}\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u^{\,2}\right)\right]^2}}$$

$$Den := \frac{B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{\left[B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)^2} \cdot \left(A^2 + N_u^{\,2}\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2}\right)^2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u \cdot \left(N_u^{\,2}+1\right) \cdot \sqrt{\left(N_u^{\,2}-N_u+1\right)^2}}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}$$

1, 0:

$$\frac{N_u \cdot \left(A^2+N_u^{\,2}\right) \cdot \sqrt{\left(A^2-A \cdot N_u+N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)}$$

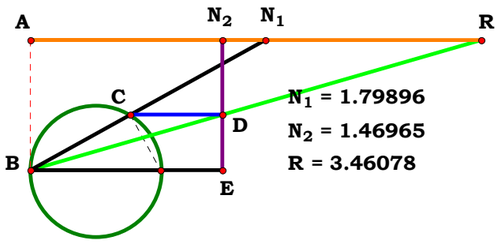
0, 2:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(N_u^{\,2}-N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}$$

1, 2:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)^2} \cdot \left(A^2+N_u^{\,2}\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)}$$

3OBT1R11



Unit. $AB := 1$ Given. $N_1 := 1.79896$ $N_2 := 1.46965$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$\frac{A^2 + N_u^2}{A \cdot B} = 3.460786$ $Num := \frac{A^2 + N_u^2}{\sqrt{\left(A^2 + N_u^2\right)^2}}$ $Den := \frac{A \cdot B}{\sqrt{(A \cdot B)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{\sqrt{A^2 \cdot B^2} \cdot \left(A^2 + N_u^2\right)}{A \cdot B \cdot \sqrt{\left(A^2 + N_u^2\right)^2}} = 0$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u^{\,2}+1}{\sqrt{\left(N_u^{\,2}+1\right)^2}}$$

1, 0:

$$\frac{\sqrt{A^2}\cdot\left(A^2+N_u^{\,2}\right)}{A\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}$$

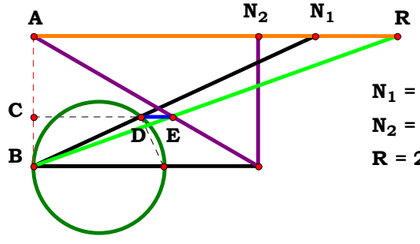
0, 2:

$$\frac{\sqrt{B^2}\cdot\left(N_u^{\,2}+1\right)}{B\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}$$

1, 2:

$$\frac{\sqrt{A^2\cdot B^2}\cdot\left(A^2+N_u^{\,2}\right)}{A\cdot B\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}$$

3OBT1R12



$N_1 = 2.15734$

$N_2 = 1.72148$

$R = 2.79029$

Unit. $AB := 1$ **Given.** $N_1 := 2.15734$ $N_2 := 1.72148$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A^2 - A \cdot N_u + N_u^2}{A \cdot B} = 2.790302$$

$$Num := \frac{A^2 - A \cdot N_u + N_u^2}{\sqrt{\left(A^2 - A \cdot N_u + N_u^2\right)^2}}$$

$$Den := \frac{A \cdot B}{\sqrt{(A \cdot B)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A^2 \cdot B^2} \cdot \left(A^2 - A \cdot N_u + N_u^2\right)}{A \cdot B \cdot \sqrt{\left(A^2 - A \cdot N_u + N_u^2\right)^2}} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u^2 - N_u + 1}{\sqrt{\left(N_u^2 - N_u + 1\right)^2}}$$

1, 0:

$$\frac{\sqrt{A^2}\cdot\left(A^2 - A\cdot N_u + N_u^2\right)}{A\cdot\sqrt{\left(A^2 - A\cdot N_u + N_u^2\right)^2}}$$

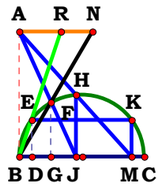
0, 2:

$$\frac{\sqrt{B^2}\cdot\left(N_u^2 - N_u + 1\right)}{B\cdot\sqrt{\left(N_u^2 - N_u + 1\right)^2}}$$

1, 2:

$$\frac{\sqrt{A^2\cdot B^2}\cdot\left(A^2 - A\cdot N_u + N_u^2\right)}{A\cdot B\cdot\sqrt{\left(A^2 - A\cdot N_u + N_u^2\right)^2}}$$

3OBT1R13



N = 0.58586
R = 0.32886

Unit. $AB := 1$ Given. $N := .58586$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{\sqrt{A^2 - A \cdot N_u - N_u \cdot \sqrt{A \cdot (A - N_u)}}}{N_u} = 0.328848$$

$$Num := \frac{\sqrt{A^2 - A \cdot N_u - N_u \cdot \sqrt{A \cdot (A - N_u)}}}{\sqrt{\left[\sqrt{A^2 - A \cdot N_u - N_u \cdot \sqrt{A \cdot (A - N_u)}}\right]^2}}$$

$$Den := \frac{N_u}{\sqrt{(N_u)^2}}$$

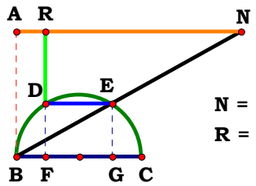
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{N_u^2}}{N_u} = 0$$

3OBT1R14



N = 1.79798
R = 0.23625

Unit. $AB := 1$ Given. $N := 1.79798$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

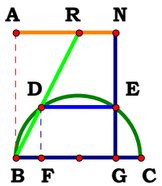
$\frac{A^2}{A^2 + N_u^2} = 0.236254$ $Num := \frac{A^2}{\sqrt{(A^2)^2}}$ $Den := \frac{A^2 + N_u^2}{\sqrt{(A^2 + N_u^2)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{A^2 \cdot \sqrt{(A^2 + N_u^2)^2}}{\sqrt{A^4} \cdot (A^2 + N_u^2)} = 0$

3OBT1R15



R = 0.79798
R = 0.50315

Unit. $AB := 1$ **Given.** $N := .79798$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A - N_u}{\sqrt{N_u \cdot (A - N_u)}} = 0.503154$$

$$Num := \frac{A - N_u}{\sqrt{(A - N_u)^2}}$$

$$Den := \frac{\sqrt{N_u \cdot (A - N_u)}}{\sqrt{\left[\sqrt{N_u \cdot (A - N_u)}\right]^2}}$$

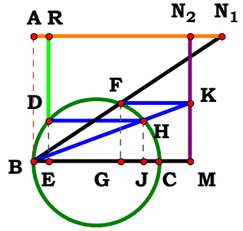
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A - N_u}{\sqrt{(A - N_u)^2}} = 0$$

3OBT02R0



$N_1 = 1.50505$
$N_2 = 1.25253$
$R = 0.11928$

Unit. $AB := 1$ Given. $N_1 := 1.50505$ $N_2 := 1.25253$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A^2 \cdot B^2}{A^4 + A^2 \cdot B^2 + N_u{}^2 \cdot \left(2 \cdot A^2 + N_u{}^2\right)} = 0.119276$$

$$Num := \frac{A^2 \cdot B^2}{\sqrt{\left(A^2 \cdot B^2\right)^2}}$$

$$Den := \frac{A^4 + A^2 \cdot B^2 + N_u{}^2 \cdot \left(2 \cdot A^2 + N_u{}^2\right)}{\sqrt{\left[A^4 + A^2 \cdot B^2 + N_u{}^2 \cdot \left(2 \cdot A^2 + N_u{}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^2 \cdot B^2 \cdot \sqrt{\left[N_u{}^2 \cdot \left(2 \cdot A^2 + N_u{}^2\right) + A^4 + A^2 \cdot B^2\right]^2}}{\sqrt{A^4 \cdot B^4} \cdot \left(A^4 + A^2 \cdot B^2 + 2 \cdot A^2 \cdot N_u{}^2 + N_u{}^4\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{\sqrt{\left[N_u{}^2\cdot\left(N_u{}^2+2\right)+2\right]^2}}{N_u{}^4+2\cdot N_u{}^2+2}$$

1, 0:

$$\frac{A^2\cdot\sqrt{\left[N_u{}^2\cdot\left(2\cdot A^2+N_u{}^2\right)+A^2+A^4\right]^2}}{\sqrt{A^4}\cdot\left(A^4+2\cdot A^2\cdot N_u{}^2+A^2+N_u{}^4\right)}$$

0, 2:

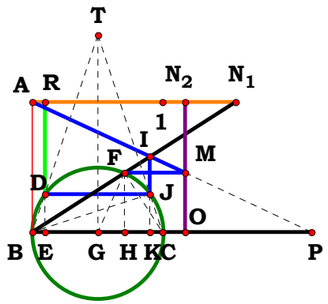
$$\frac{B^2\cdot\sqrt{\left[B^2+N_u{}^2\cdot\left(N_u{}^2+2\right)+1\right]^2}}{\sqrt{B^4}\cdot\left(B^2+N_u{}^4+2\cdot N_u{}^2+1\right)}$$

1, 2:

$$\frac{A^2\cdot B^2\cdot\sqrt{\left[N_u{}^2\cdot\left(2\cdot A^2+N_u{}^2\right)+A^4+A^2\cdot B^2\right]^2}}{\sqrt{A^4\cdot B^4}\cdot\left(A^4+A^2\cdot B^2+2\cdot A^2\cdot N_u{}^2+N_u{}^4\right)}$$

3OBT2R1

Descriptions.



$N_1 = 1.55688$

$N_2 = 1.16939$

$R = 0.09797$

Unit. $AB := 1$ **Given.** $N_1 := 1.55688$ $N_2 := 1.16939$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

$$\frac{(A+B)\cdot N_u^{\,2} - N_u^{\,3} + A\cdot(A-N_u)\cdot(A+B)}{B\cdot\left(A^2 - A\cdot N_u + N_u^{\,2}\right) + A\cdot\left(A^2 + N_u^{\,2}\right)} = 0.09797$$

$$Num := \frac{(A+B)\cdot N_u^{\,2} - N_u^{\,3} + A\cdot(A-N_u)\cdot(A+B)}{\sqrt{\left[(A+B)\cdot N_u^{\,2} - N_u^{\,3} + A\cdot(A-N_u)\cdot(A+B)\right]^2}}$$

$$Den := \frac{B\cdot\left(A^2 - A\cdot N_u + N_u^{\,2}\right) + A\cdot\left(A^2 + N_u^{\,2}\right)}{\sqrt{\left[B\cdot\left(A^2 - A\cdot N_u + N_u^{\,2}\right) + A\cdot\left(A^2 + N_u^{\,2}\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

Num = 1 **Den = 1** **L = 1**

$$L - \frac{\sqrt{\left[B\cdot\left(A^2 - A\cdot N_u + N_u^{\,2}\right) + A\cdot\left(A^2 + N_u^{\,2}\right)\right]^2}\cdot\left(A^3 - A^2\cdot N_u + B\cdot A^2 + A\cdot N_u^{\,2} - B\cdot A\cdot N_u - N_u^{\,3} + B\cdot N_u^{\,2}\right)}{\left(A^3 + B\cdot A^2 + A\cdot N_u^{\,2} - B\cdot A\cdot N_u + B\cdot N_u^{\,2}\right)\cdot\sqrt{\left[N_u^{\,2}\cdot(A+B) - N_u^{\,3} + A\cdot(A+B)\cdot\left(A-N_u\right)\right]^2}} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$-\frac{\sqrt{\left(2\cdot N_u{}^2-N_u+2\right)^2}\cdot\left(N_u{}^3-2\cdot N_u{}^2+2\cdot N_u-2\right)}{\sqrt{\left(N_u{}^3-2\cdot N_u{}^2+2\cdot N_u-2\right)^2}\cdot\left(2\cdot N_u{}^2-N_u+2\right)}$$

1, 0:

$$\frac{\sqrt{\left[A\cdot\left(A^2+N_u{}^2\right)+A^2+N_u{}^2-A\cdot N_u\right]^2}\cdot\left(A^3-A^2\cdot N_u+A^2+A\cdot N_u{}^2-A\cdot N_u-N_u{}^3+N_u{}^2\right)}{\sqrt{\left[N_u{}^2\cdot(A+1)-N_u{}^3+A\cdot(A+1)\cdot\left(A-N_u\right)\right]^2}\cdot\left(A^3+A^2+A\cdot N_u{}^2-A\cdot N_u+N_u{}^2\right)}$$

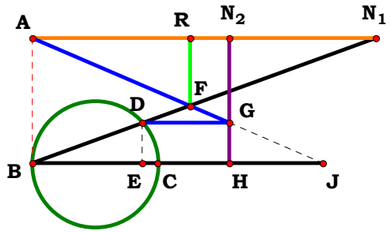
0, 2:

$$\frac{\sqrt{\left[B\cdot\left(N_u{}^2-N_u+1\right)+N_u{}^2+1\right]^2}\cdot\left(B-N_u+N_u{}^2-N_u{}^3-B\cdot N_u+B\cdot N_u{}^2+1\right)}{\sqrt{\left[N_u{}^3+(B+1)\cdot\left(N_u-1\right)-N_u{}^2\cdot(B+1)\right]^2}\cdot\left(B+N_u{}^2-B\cdot N_u+B\cdot N_u{}^2+1\right)}$$

1, 2:

$$\frac{\sqrt{\left[B\cdot\left(A^2-A\cdot N_u+N_u{}^2\right)+A\cdot\left(A^2+N_u{}^2\right)\right]^2}\cdot\left(A^3-A^2\cdot N_u+B\cdot A^2+A\cdot N_u{}^2-B\cdot A\cdot N_u-N_u{}^3+B\cdot N_u{}^2\right)}{\left(A^3+B\cdot A^2+A\cdot N_u{}^2-B\cdot A\cdot N_u+B\cdot N_u{}^2\right)\cdot\sqrt{\left[N_u{}^2\cdot(A+B)-N_u{}^3+A\cdot(A+B)\cdot\left(A-N_u\right)\right]^2}}$$

3OBT02R2



$N_1 = 2.74747$

$N_2 = 1.57576$

$R = 1.25846$

Unit. $AB := 1$ **Given.** $N_1 := 2.74747$ $N_2 := 1.57576$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + {N_u}^2\right)}{\left(A^2 + {N_u}^2\right) \cdot (A + B) - A \cdot B \cdot N_u} = 1.258457$$

$$Num := \frac{N_u \cdot \left(A^2 + {N_u}^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 + {N_u}^2\right)\right]^2}}$$

$$Den := \frac{\left(A^2 + {N_u}^2\right) \cdot (A + B) - A \cdot B \cdot N_u}{\sqrt{\left[\left(A^2 + {N_u}^2\right) \cdot (A + B) - A \cdot B \cdot N_u\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[\left(A^2 + {N_u}^2\right) \cdot (A + B) - A \cdot B \cdot N_u\right]^2} \cdot \left(A^2 + {N_u}^2\right)}{\sqrt{{N_u}^2 \cdot \left(A^2 + {N_u}^2\right)^2} \cdot \left(A^3 + B \cdot A^2 + A \cdot {N_u}^2 - B \cdot A \cdot N_u + B \cdot {N_u}^2\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u \cdot \sqrt{\left(2 \cdot N_u{}^2 - N_u + 2\right)^2} \cdot \left(N_u{}^2 + 1\right)}{\sqrt{N_u{}^2 \cdot \left(N_u{}^2 + 1\right)^2} \cdot \left(2 \cdot N_u{}^2 - N_u + 2\right)}$$

1, 0:

$$\frac{N_u \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{\left[A \cdot N_u - (A+1) \cdot \left(A^2 + N_u{}^2\right)\right]^2}}{\sqrt{N_u{}^2 \cdot \left(A^2 + N_u{}^2\right)^2} \cdot \left(A^3 + A^2 + A \cdot N_u{}^2 - A \cdot N_u + N_u{}^2\right)}$$

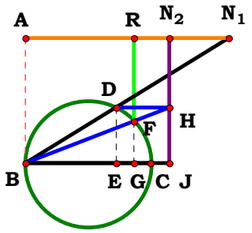
0, 2:

$$\frac{N_u \cdot \left(N_u{}^2 + 1\right) \cdot \sqrt{\left[B \cdot N_u - (B+1) \cdot \left(N_u{}^2 + 1\right)\right]^2}}{\sqrt{N_u{}^2 \cdot \left(N_u{}^2 + 1\right)^2} \cdot \left(B + N_u{}^2 - B \cdot N_u + B \cdot N_u{}^2 + 1\right)}$$

1, 2:

$$\frac{N_u \cdot \sqrt{\left[\left(A^2 + N_u{}^2\right) \cdot (A+B) - A \cdot B \cdot N_u\right]^2} \cdot \left(A^2 + N_u{}^2\right)}{\sqrt{N_u{}^2 \cdot \left(A^2 + N_u{}^2\right)^2} \cdot \left(A^3 + B \cdot A^2 + A \cdot N_u{}^2 - B \cdot A \cdot N_u + B \cdot N_u{}^2\right)}$$

3OBT2R3



$N_1 = 1.62626$
$N_2 = 1.15152$
R = 0.86946

Unit. $AB := 1$ Given. $N_1 := 1.62626$ $N_2 := 1.15152$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{\left(A^2 + {N_u}^2\right)^2}{A^4 + A^2 \cdot B^2 + 2 \cdot A^2 \cdot {N_u}^2 + {N_u}^4} = 0.869456$$

$$Num := \frac{\left(A^2 + {N_u}^2\right)^2}{\sqrt{\left[\left(A^2 + {N_u}^2\right)^2\right]^2}}$$

$$Den := \frac{A^4 + A^2 \cdot B^2 + 2 \cdot A^2 \cdot {N_u}^2 + {N_u}^4}{\sqrt{\left(A^4 + A^2 \cdot B^2 + 2 \cdot A^2 \cdot {N_u}^2 + {N_u}^4\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

Num = 1 Den = 1 L = 1

$$L - \frac{\left(A^2 + {N_u}^2\right)^2 \cdot \sqrt{\left(A^4 + A^2 \cdot B^2 + 2 \cdot A^2 \cdot {N_u}^2 + {N_u}^4\right)^2}}{\sqrt{\left(A^2 + {N_u}^2\right)^4} \cdot \left(A^4 + A^2 \cdot B^2 + 2 \cdot A^2 \cdot {N_u}^2 + {N_u}^4\right)} = 0$$

For 2 variables there are 4 subsets.

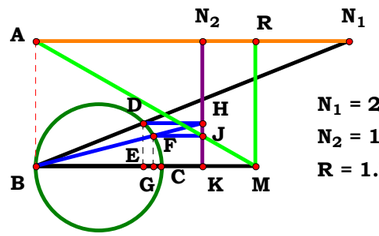
0, 0: $$\frac{\sqrt{\left(N_u^4 + 2 \cdot N_u^2 + 2\right)^2} \cdot \left(N_u^2 + 1\right)^2}{\sqrt{\left(N_u^2 + 1\right)^4} \cdot \left(N_u^4 + 2 \cdot N_u^2 + 2\right)}$$

1, 0: $$\frac{\left(A^2 + N_u^2\right)^2 \cdot \sqrt{\left(A^4 + 2 \cdot A^2 \cdot N_u^2 + A^2 + N_u^4\right)^2}}{\sqrt{\left(A^2 + N_u^2\right)^4} \cdot \left(A^4 + 2 \cdot A^2 \cdot N_u^2 + A^2 + N_u^4\right)}$$

0, 2: $$\frac{\sqrt{\left(B^2 + N_u^4 + 2 \cdot N_u^2 + 1\right)^2} \cdot \left(N_u^2 + 1\right)^2}{\sqrt{\left(N_u^2 + 1\right)^4} \cdot \left(B^2 + N_u^4 + 2 \cdot N_u^2 + 1\right)}$$

1, 2: $$\frac{\left(A^2 + N_u^2\right)^2 \cdot \sqrt{\left(A^4 + A^2 \cdot B^2 + 2 \cdot A^2 \cdot N_u^2 + N_u^4\right)^2}}{\sqrt{\left(A^2 + N_u^2\right)^4} \cdot \left(A^4 + A^2 \cdot B^2 + 2 \cdot A^2 \cdot N_u^2 + N_u^4\right)}$$

3OBT2R4



$N_1 = 2.50505$
$N_2 = 1.33333$
$R = 1.75924$

Unit. $AB := 1$ Given. $N_1 := 2.50505$ $N_2 := 1.33333$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A^2 \cdot N_u \cdot \left(A^2 + B^2\right) + {N_u}^3 \cdot \left(2 \cdot A^2 + {N_u}^2\right)}{A^2 \cdot B^3 + B \cdot \left(A^2 + {N_u}^2\right) \cdot \left(A^2 - B \cdot A + {N_u}^2\right)} = 1.759238$$

$$Num := \frac{A^2 \cdot N_u \cdot \left(A^2 + B^2\right) + {N_u}^3 \cdot \left(2 \cdot A^2 + {N_u}^2\right)}{\sqrt{\left[A^2 \cdot N_u \cdot \left(A^2 + B^2\right) + {N_u}^3 \cdot \left(2 \cdot A^2 + {N_u}^2\right)\right]^2}}$$

$$Den := \frac{A^2 \cdot B^3 + B \cdot \left(A^2 + {N_u}^2\right) \cdot \left(A^2 - B \cdot A + {N_u}^2\right)}{\sqrt{\left[A^2 \cdot B^3 + B \cdot \left(A^2 + {N_u}^2\right) \cdot \left(A^2 - B \cdot A + {N_u}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left[A^2 \cdot B^3 + B \cdot \left(A^2 + {N_u}^2\right) \cdot \left(A^2 - B \cdot A + {N_u}^2\right)\right]^2} \cdot N_u \cdot \left(A^4 + A^2 \cdot B^2 + 2 \cdot A^2 \cdot {N_u}^2 + {N_u}^4\right)}{\sqrt{\left[{N_u}^3 \cdot \left(2 \cdot A^2 + {N_u}^2\right) + A^2 \cdot N_u \cdot \left(A^2 + B^2\right)\right]^2} \cdot B \cdot \left(A^4 - A^3 \cdot B + A^2 \cdot B^2 + 2 \cdot A^2 \cdot {N_u}^2 - A \cdot B \cdot {N_u}^2 + {N_u}^4\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u \cdot \sqrt{\left[N_u^{\,2} \cdot \left(N_u^{\,2}+1\right)+1\right]^2} \cdot \left(N_u^{\,4}+2 \cdot N_u^{\,2}+2\right)}{\sqrt{\left[2 \cdot N_u + N_u^{\,3} \cdot \left(N_u^{\,2}+2\right)\right]^2} \cdot \left(N_u^{\,4}+N_u^{\,2}+1\right)}$$

1, 0:

$$\frac{N_u \cdot \sqrt{\left[A^2+\left(A^2+N_u^{\,2}\right) \cdot \left(A^2-A+N_u^{\,2}\right)\right]^2} \cdot \left(A^4+2 \cdot A^2 \cdot N_u^{\,2}+A^2+N_u^{\,4}\right)}{\sqrt{\left[N_u^{\,3} \cdot \left(2 \cdot A^2+N_u^{\,2}\right)+A^2 \cdot N_u \cdot \left(A^2+1\right)\right]^2} \cdot \left(A^4-A^3+2 \cdot A^2 \cdot N_u^{\,2}+A^2-A \cdot N_u^{\,2}+N_u^{\,4}\right)}$$

0, 2:

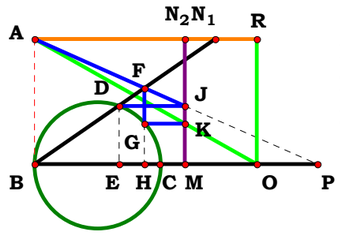
$$\frac{N_u \cdot \sqrt{\left[B^3+B \cdot \left(N_u^{\,2}+1\right) \cdot \left(N_u^{\,2}-B+1\right)\right]^2} \cdot \left(B^2+N_u^{\,4}+2 \cdot N_u^{\,2}+1\right)}{B \cdot \sqrt{\left[N_u \cdot \left(B^2+1\right)+N_u^{\,3} \cdot \left(N_u^{\,2}+2\right)\right]^2} \cdot \left(B^2-B \cdot N_u^{\,2}-B+N_u^{\,4}+2 \cdot N_u^{\,2}+1\right)}$$

1, 2:

$$\frac{\sqrt{\left[A^2 \cdot B^3+B \cdot \left(A^2+N_u^{\,2}\right) \cdot \left(A^2-B \cdot A+N_u^{\,2}\right)\right]^2} \cdot N_u \cdot \left(A^4+A^2 \cdot B^2+2 \cdot A^2 \cdot N_u^{\,2}+N_u^{\,4}\right)}{\sqrt{\left[N_u^{\,3} \cdot \left(2 \cdot A^2+N_u^{\,2}\right)+A^2 \cdot N_u \cdot \left(A^2+B^2\right)\right]^2} \cdot B \cdot \left(A^4-A^3 \cdot B+A^2 \cdot B^2+2 \cdot A^2 \cdot N_u^{\,2}-A \cdot B \cdot N_u^{\,2}+N_u^{\,4}\right)}$$

3OBT2R5

Descriptions.



$N_1 = 1.44444$

$N_2 = 1.20202$

$R = 1.77715$

Unit. $AB := 1$ **Given.** $N_1 := 1.44444$ $N_2 := 1.20202$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

$$\frac{N_u^2 \cdot \left(A^3 + B \cdot A^2 + A \cdot N_u^2 - B \cdot A \cdot N_u + B \cdot N_u^2\right)}{B \cdot \left[A \cdot N_u^3 - \sqrt{N_u^3 \cdot (A+B) \cdot \left(A^4 - A^3 \cdot N_u + 2 \cdot A^2 \cdot N_u^2 + N_u^4\right) - N_u^6 \cdot \left(2 \cdot A^2 + B \cdot A + N_u^2\right)} + N_u \cdot \left[A^3 + B \cdot \left(A^2 - A \cdot N_u + N_u^2\right)\right]\right]} = 1.777157$$

$$\text{Num} := \frac{N_u^2 \cdot \left(A^3 + B \cdot A^2 + A \cdot N_u^2 - B \cdot A \cdot N_u + B \cdot N_u^2\right)}{\sqrt{\left[N_u^2 \cdot \left(A^3 + B \cdot A^2 + A \cdot N_u^2 - B \cdot A \cdot N_u + B \cdot N_u^2\right)\right]^2}}$$

$$\text{Den} := \frac{B \cdot \left[A \cdot N_u^3 - \sqrt{N_u^3 \cdot (A+B) \cdot \left(A^4 - A^3 \cdot N_u + 2 \cdot A^2 \cdot N_u^2 + N_u^4\right) - N_u^6 \cdot \left(2 \cdot A^2 + B \cdot A + N_u^2\right)} + N_u \cdot \left[A^3 + B \cdot \left(A^2 - A \cdot N_u + N_u^2\right)\right]\right]}{\sqrt{\left[B \cdot \left[A \cdot N_u^3 - \sqrt{N_u^3 \cdot (A+B) \cdot \left(A^4 - A^3 \cdot N_u + 2 \cdot A^2 \cdot N_u^2 + N_u^4\right) - N_u^6 \cdot \left(2 \cdot A^2 + B \cdot A + N_u^2\right)} + N_u \cdot \left[A^3 + B \cdot \left(A^2 - A \cdot N_u + N_u^2\right)\right]\right]\right]^2}}$$

$$L := \frac{\text{Num}}{\text{Den}}$$

Definitions.

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{N_u^2 \cdot \sqrt{B^2 \cdot \left[N_u \cdot \left[B \cdot \left(A^2 - A \cdot N_u + N_u^2\right) + A^3\right] - \sqrt{N_u^3 \cdot (A+B) \cdot \left(A^4 - A^3 \cdot N_u + 2 \cdot A^2 \cdot N_u^2 + N_u^4\right) - N_u^6 \cdot \left(2 \cdot A^2 + B \cdot A + N_u^2\right)} + A \cdot N_u^3\right]^2} \cdot \left(A^3 + B \cdot A^2 + A \cdot N_u^2 - B \cdot A \cdot N_u + B \cdot N_u^2\right)}{B \cdot \sqrt{N_u^4 \cdot \left(A^3 + B \cdot A^2 + A \cdot N_u^2 - B \cdot A \cdot N_u + B \cdot N_u^2\right)^2} \cdot \left[A \cdot N_u^3 - \sqrt{N_u^3 \cdot (A+B) \cdot \left(A^4 - A^3 \cdot N_u + 2 \cdot A^2 \cdot N_u^2 + N_u^4\right) - N_u^6 \cdot \left(2 \cdot A^2 + B \cdot A + N_u^2\right)} + A^3 \cdot N_u + B \cdot N_u^3 - A \cdot B \cdot N_u^2 + A^2 \cdot B \cdot N_u\right]} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$-\frac{N_u^{\,2}\cdot\sqrt{\left[N_u\cdot\left(N_u^{\,2}-N_u+2\right)-\sqrt{2\cdot N_u^{\,3}\cdot\left(N_u^{\,4}+2\cdot N_u^{\,2}-N_u+1\right)-N_u^{\,6}\cdot\left(N_u^{\,2}+3\right)}+N_u^{\,3}\right]^2}\cdot\left(2\cdot N_u^{\,2}-N_u+2\right)}{\sqrt{N_u^{\,4}\cdot\left(2\cdot N_u^{\,2}-N_u+2\right)^2}\cdot\left[\sqrt{2\cdot N_u^{\,3}\cdot\left(N_u^{\,4}+2\cdot N_u^{\,2}-N_u+1\right)-N_u^{\,6}\cdot\left(N_u^{\,2}+3\right)}-2\cdot N_u+N_u^{\,2}-2\cdot N_u^{\,3}\right]}$$

1, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left[N_u\cdot\left(A^3+A^2-A\cdot N_u+N_u^{\,2}\right)-\sqrt{N_u^{\,3}\cdot(A+1)\cdot\left(A^4-A^3\cdot N_u+2\cdot A^2\cdot N_u^{\,2}+N_u^{\,4}\right)-N_u^{\,6}\cdot\left(2\cdot A^2+A+N_u^{\,2}\right)}+A\cdot N_u^{\,3}\right]^2}\cdot\left(A^3+A^2+A\cdot N_u^{\,2}-A\cdot N_u+N_u^{\,2}\right)}{\sqrt{N_u^{\,4}\cdot\left(A^3+A^2+A\cdot N_u^{\,2}-A\cdot N_u+N_u^{\,2}\right)^2}\cdot\left[N_u^{\,3}-\sqrt{N_u^{\,3}\cdot(A+1)\cdot\left(A^4-A^3\cdot N_u+2\cdot A^2\cdot N_u^{\,2}+N_u^{\,4}\right)-N_u^{\,6}\cdot\left(2\cdot A^2+A+N_u^{\,2}\right)}-A\cdot N_u^{\,2}+A^2\cdot N_u+A\cdot N_u^{\,3}+A^3\cdot N_u\right]}$$

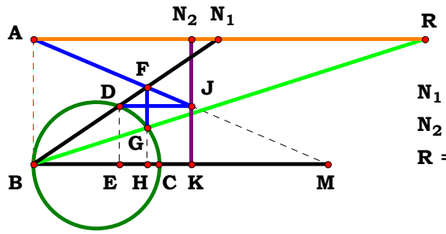
0, 2:

$$\frac{N_u^{\,2}\cdot\sqrt{B^2\cdot\left[N_u^{\,3}-\sqrt{N_u^{\,3}\cdot(B+1)\cdot\left(N_u^{\,4}+2\cdot N_u^{\,2}-N_u+1\right)-N_u^{\,6}\cdot\left(N_u^{\,2}+B+2\right)}+N_u\cdot\left[B\cdot\left(N_u^{\,2}-N_u+1\right)+1\right]\right]^2}\cdot\left(B+N_u^{\,2}-B\cdot N_u+B\cdot N_u^{\,2}+1\right)}{B\cdot\sqrt{N_u^{\,4}\cdot\left(B+N_u^{\,2}-B\cdot N_u+B\cdot N_u^{\,2}+1\right)^2}\cdot\left[N_u-\sqrt{N_u^{\,3}\cdot(B+1)\cdot\left(N_u^{\,4}+2\cdot N_u^{\,2}-N_u+1\right)-N_u^{\,6}\cdot\left(N_u^{\,2}+B+2\right)}+N_u^{\,3}+B\cdot N_u-B\cdot N_u^{\,2}+B\cdot N_u^{\,3}\right]}$$

1, 2:

$$\frac{N_u^{\,2}\cdot\sqrt{B^2\cdot\left[N_u\cdot\left[B\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)+A^3\right]-\sqrt{N_u^{\,3}\cdot(A+B)\cdot\left(A^4-A^3\cdot N_u+2\cdot A^2\cdot N_u^{\,2}+N_u^{\,4}\right)-N_u^{\,6}\cdot\left(2\cdot A^2+B\cdot A+N_u^{\,2}\right)}+A\cdot N_u^{\,3}\right]^2}\cdot\left(A^3+B\cdot A^2+A\cdot N_u^{\,2}-B\cdot A\cdot N_u+B\cdot N_u^{\,2}\right)}{B\cdot\sqrt{N_u^{\,4}\cdot\left(A^3+B\cdot A^2+A\cdot N_u^{\,2}-B\cdot A\cdot N_u+B\cdot N_u^{\,2}\right)^2}\cdot\left[A\cdot N_u^{\,3}-\sqrt{N_u^{\,3}\cdot(A+B)\cdot\left(A^4-A^3\cdot N_u+2\cdot A^2\cdot N_u^{\,2}+N_u^{\,4}\right)-N_u^{\,6}\cdot\left(2\cdot A^2+B\cdot A+N_u^{\,2}\right)}+A^3\cdot N_u+B\cdot N_u^{\,3}-A\cdot B\cdot N_u^{\,2}+A^2\cdot B\cdot N_u\right]}$$

3OBT2R6



$N_1 = 1.47475$

$N_2 = 1.26263$

$R = 3.12814$

Unit. $AB := 1$ **Given.** $N_1 := 1.47475$ $N_2 := 1.26263$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u^2 \cdot \left(A^2 + N_u^2\right)}{\sqrt{N_u^3 \cdot \left(A^2 + N_u^2\right) \cdot \left[\left(A^2 - A \cdot N_u + N_u^2\right) \cdot (A + B) - N_u^3\right]}} = 3.128177$$

$$Num := \frac{N_u^2 \cdot \left(A^2 + N_u^2\right)}{\sqrt{\left[N_u^2 \cdot \left(A^2 + N_u^2\right)\right]^2}}$$

$$Den := \frac{\sqrt{N_u^3 \cdot \left(A^2 + N_u^2\right) \cdot \left[\left(A^2 - A \cdot N_u + N_u^2\right) \cdot (A + B) - N_u^3\right]}}{\sqrt{\left[\sqrt{N_u^3 \cdot \left(A^2 + N_u^2\right) \cdot \left[\left(A^2 - A \cdot N_u + N_u^2\right) \cdot (A + B) - N_u^3\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{N_u^2 \cdot \left(A^2 + N_u^2\right)}{\sqrt{N_u^4 \cdot \left(A^2 + N_u^2\right)^2}} = 0$$

For 2 variables there are 4 subsets.

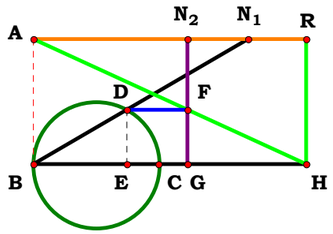
0, 0: $$\frac{N_u^2 \cdot \left(N_u^2 + 1\right)}{\sqrt{N_u^4 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 0: $$\frac{N_u^2 \cdot \left(A^2 + N_u^2\right)}{\sqrt{N_u^4 \cdot \left(A^2 + N_u^2\right)^2}}$$

0, 2: $$\frac{N_u^2 \cdot \left(N_u^2 + 1\right)}{\sqrt{N_u^4 \cdot \left(N_u^2 + 1\right)^2}}$$

1, 2: $$\frac{N_u^2 \cdot \left(A^2 + N_u^2\right)}{\sqrt{N_u^4 \cdot \left(A^2 + N_u^2\right)^2}}$$

3OBT2R7



$N_1 = 1.71717$

$N_2 = 1.23232$

$R = 2.18061$

Unit. $AB := 1$ **Given.** $N_1 := 1.71717$ $N_2 := 1.23232$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u^{\,2}\right)}{B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)} = 2.180606$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u^{\,2}\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u^{\,2}\right)\right]^2}}$$

$$Den := \frac{B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{\left[B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)^2} \cdot \left(A^2 + N_u^{\,2}\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2}\right)^2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u \cdot \left(N_u^{\,2}+1\right) \cdot \sqrt{\left(N_u^{\,2}-N_u+1\right)^2}}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}$$

1, 0:

$$\frac{N_u \cdot \left(A^2+N_u^{\,2}\right) \cdot \sqrt{\left(A^2-A \cdot N_u+N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)}$$

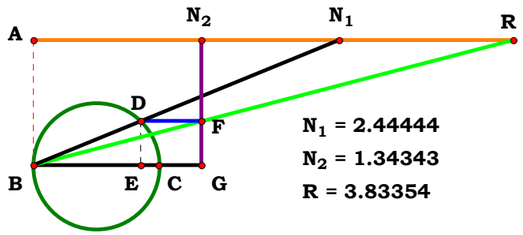
0, 2:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(N_u^{\,2}-N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}$$

1, 2:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)^2} \cdot \left(A^2+N_u^{\,2}\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)}$$

3OBT2R8



Unit. $AB := 1$ Given. $N_1 := 2.44444$ $N_2 := 1.34343$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$\frac{A^2 + N_u^2}{A \cdot B} = 3.83352$ $Num := \frac{A^2 + N_u^2}{\sqrt{\left(A^2 + N_u^2\right)^2}}$ $Den := \frac{A \cdot B}{\sqrt{(A \cdot B)^2}}$ $L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{\sqrt{A^2 \cdot B^2} \cdot \left(A^2 + N_u^2\right)}{A \cdot B \cdot \sqrt{\left(A^2 + N_u^2\right)^2}} = 0$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u^{\,2}+1}{\sqrt{\left(N_u^{\,2}+1\right)^2}}$$

1, 0:

$$\frac{\sqrt{A^2}\cdot\left(A^2+N_u^{\,2}\right)}{A\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}$$

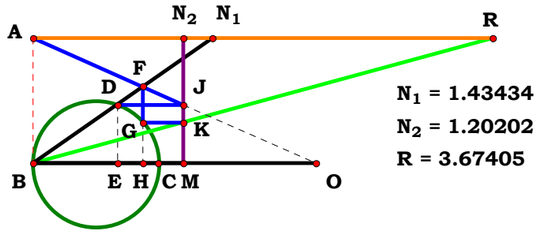
0, 2:

$$\frac{\sqrt{B^2}\cdot\left(N_u^{\,2}+1\right)}{B\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}$$

1, 2:

$$\frac{\sqrt{A^2\cdot B^2}\cdot\left(A^2+N_u^{\,2}\right)}{A\cdot B\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}$$

3OBT2R9



$N_1 = 1.43434$

$N_2 = 1.20202$

$R = 3.67405$

Unit. $AB := 1$ **Given.** $N_1 := 1.43434$ $N_2 := 1.20202$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u^2 \cdot \left(A^3 + B \cdot A^2 + A \cdot N_u^2 - B \cdot A \cdot N_u + B \cdot N_u^2\right)}{B \cdot \sqrt{N_u^3 \cdot \left(A^2 + N_u^2\right) \cdot \left[A^3 + \left(A^2 - A \cdot N_u + N_u^2\right) \cdot \left(B - N_u\right)\right]}} = 3.674031$$

$$Num := \frac{N_u^2 \cdot \left(A^3 + B \cdot A^2 + A \cdot N_u^2 - B \cdot A \cdot N_u + B \cdot N_u^2\right)}{\sqrt{\left[N_u^2 \cdot \left(A^3 + B \cdot A^2 + A \cdot N_u^2 - B \cdot A \cdot N_u + B \cdot N_u^2\right)\right]^2}}$$

$$Den := \frac{B \cdot \sqrt{N_u^3 \cdot \left(A^2 + N_u^2\right) \cdot \left[A^3 + \left(A^2 - A \cdot N_u + N_u^2\right) \cdot \left(B - N_u\right)\right]}}{\sqrt{\left[B \cdot \sqrt{N_u^3 \cdot \left(A^2 + N_u^2\right) \cdot \left[A^3 + \left(A^2 - A \cdot N_u + N_u^2\right) \cdot \left(B - N_u\right)\right]}\right]^2}}$$

$L := \frac{Num}{Den}$

Definitions.

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{N_u^2 \cdot \sqrt{B^2 \cdot N_u^3 \cdot \left(A^2 + N_u^2\right) \cdot \left[A^3 + \left(B - N_u\right) \cdot \left(A^2 - A \cdot N_u + N_u^2\right)\right]} \cdot \left(A^3 + B \cdot A^2 + A \cdot N_u^2 - B \cdot A \cdot N_u + B \cdot N_u^2\right)}{B \cdot \sqrt{N_u^4 \cdot \left(A^3 + B \cdot A^2 + A \cdot N_u^2 - B \cdot A \cdot N_u + B \cdot N_u^2\right)^2} \cdot \sqrt{N_u^3 \cdot \left(A^2 + N_u^2\right) \cdot \left[A^3 + \left(B - N_u\right) \cdot \left(A^2 - A \cdot N_u + N_u^2\right)\right]}} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u^{\,2}\cdot\left(2\cdot N_u^{\,2}-N_u+2\right)}{\sqrt{N_u^{\,4}\cdot\left(2\cdot N_u^{\,2}-N_u+2\right)^2}}$$

1, 0:

$$\frac{N_u^{\,2}\cdot\left(A^3+A^2+A\cdot N_u^{\,2}-A\cdot N_u+N_u^{\,2}\right)}{\sqrt{N_u^{\,4}\cdot\left(A^3+A^2+A\cdot N_u^{\,2}-A\cdot N_u+N_u^{\,2}\right)^2}}$$

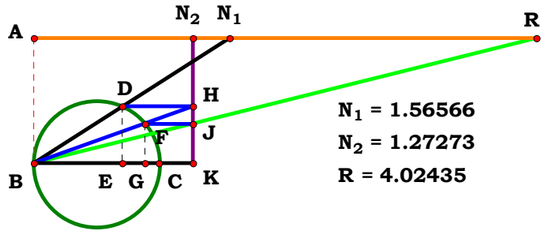
0, 2:

$$\frac{N_u^{\,2}\cdot\sqrt{B^2\cdot N_u^{\,3}\cdot\left(N_u^{\,2}+1\right)\cdot\left[\left(B-N_u\right)\cdot\left(N_u^{\,2}-N_u+1\right)+1\right]}\cdot\left(B+N_u^{\,2}-B\cdot N_u+B\cdot N_u^{\,2}+1\right)}{B\cdot\sqrt{N_u^{\,4}\cdot\left(B+N_u^{\,2}-B\cdot N_u+B\cdot N_u^{\,2}+1\right)^2}\cdot\sqrt{N_u^{\,3}\cdot\left(N_u^{\,2}+1\right)\cdot\left[\left(B-N_u\right)\cdot\left(N_u^{\,2}-N_u+1\right)+1\right]}}$$

1, 2:

$$\frac{N_u^{\,2}\cdot\sqrt{B^2\cdot N_u^{\,3}\cdot\left(A^2+N_u^{\,2}\right)\cdot\left[A^3+\left(B-N_u\right)\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)\right]}\cdot\left(A^3+B\cdot A^2+A\cdot N_u^{\,2}-B\cdot A\cdot N_u+B\cdot N_u^{\,2}\right)}{B\cdot\sqrt{N_u^{\,4}\cdot\left(A^3+B\cdot A^2+A\cdot N_u^{\,2}-B\cdot A\cdot N_u+B\cdot N_u^{\,2}\right)^2}\cdot\sqrt{N_u^{\,3}\cdot\left(A^2+N_u^{\,2}\right)\cdot\left[A^3+\left(B-N_u\right)\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)\right]}}$$

3OBT02R10



$N_1 = 1.56566$
$N_2 = 1.27273$
$R = 4.02435$

Unit. $AB := 1$ **Given.** $N_1 := 1.56566$ $N_2 := 1.27273$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u^3 \cdot \left(2 \cdot A^2 + N_u^2\right) + N_u \cdot A^2 \cdot \left(A^2 + B^2\right)}{A \cdot B^2 \cdot \left(A^2 + N_u^2\right)} = 4.024372$$

$$Num := \frac{N_u^3 \cdot \left(2 \cdot A^2 + N_u^2\right) + N_u \cdot A^2 \cdot \left(A^2 + B^2\right)}{\sqrt{\left[N_u^3 \cdot \left(2 \cdot A^2 + N_u^2\right) + N_u \cdot A^2 \cdot \left(A^2 + B^2\right)\right]^2}}$$

$$Den := \frac{A \cdot B^2 \cdot \left(A^2 + N_u^2\right)}{\sqrt{\left[A \cdot B^2 \cdot \left(A^2 + N_u^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(A^4 + A^2 \cdot B^2 + 2 \cdot A^2 \cdot N_u^2 + N_u^4\right) \cdot \sqrt{A^2 \cdot B^4 \cdot \left(A^2 + N_u^2\right)^2}}{A \cdot B^2 \cdot \sqrt{\left[N_u^3 \cdot \left(2 \cdot A^2 + N_u^2\right) + A^2 \cdot N_u \cdot \left(A^2 + B^2\right)\right]^2} \cdot \left(A^2 + N_u^2\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2}+1\right)^2 \cdot \left(N_u^{\,4}+2 \cdot N_u^{\,2}+2\right)}}{\sqrt{\left[2 \cdot N_u + N_u^{\,3} \cdot \left(N_u^{\,2}+2\right)\right]^2} \cdot \left(N_u^{\,2}+1\right)}$$

1, 0:

$$\frac{N_u \cdot \sqrt{A^2 \cdot \left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^4+2 \cdot A^2 \cdot N_u^{\,2}+A^2+N_u^{\,4}\right)}{A \cdot \left(A^2+N_u^{\,2}\right) \cdot \sqrt{\left[N_u^{\,3} \cdot \left(2 \cdot A^2+N_u^{\,2}\right)+A^2 \cdot N_u \cdot \left(A^2+1\right)\right]^2}}$$

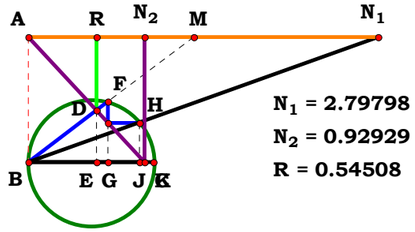
0, 2:

$$\frac{N_u \cdot \sqrt{B^4 \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(B^2+N_u^{\,4}+2 \cdot N_u^{\,2}+1\right)}{B^2 \cdot \left(N_u^{\,2}+1\right) \cdot \sqrt{\left[N_u \cdot \left(B^2+1\right)+N_u^{\,3} \cdot \left(N_u^{\,2}+2\right)\right]^2}}$$

1, 2:

$$\frac{N_u \cdot \left(A^4+A^2 \cdot B^2+2 \cdot A^2 \cdot N_u^{\,2}+N_u^{\,4}\right) \cdot \sqrt{A^2 \cdot B^4 \cdot \left(A^2+N_u^{\,2}\right)^2}}{A \cdot B^2 \cdot \sqrt{\left[N_u^{\,3} \cdot \left(2 \cdot A^2+N_u^{\,2}\right)+A^2 \cdot N_u \cdot \left(A^2+B^2\right)\right]^2} \cdot \left(A^2+N_u^{\,2}\right)}$$

3OBT3R0



Unit. $AB := 1$ Given. $N_1 := 2.79798$ $N_2 := .92929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right) \cdot \left[\left(B - N_u\right) \cdot A^2 + N_u^{\,2} \cdot \left(A + B - N_u\right)\right]} + B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)} = 0.545076$$

$$Num := \frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{\left[N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)\right]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right) \cdot \left[\left(B - N_u\right) \cdot A^2 + N_u^{\,2} \cdot \left(A + B - N_u\right)\right]} + B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{\left[\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right) \cdot \left[\left(B - N_u\right) \cdot A^2 + N_u^{\,2} \cdot \left(A + B - N_u\right)\right]} + B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right) + \sqrt{N_u \cdot \left[A^2 \cdot \left(B - N_u\right) + N_u^{\,2} \cdot \left(A + B - N_u\right)\right] \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}\right]^2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)^2} \cdot \left[\sqrt{N_u \cdot \left[A^2 \cdot \left(B - N_u\right) + N_u^{\,2} \cdot \left(A + B - N_u\right)\right] \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)} + A^2 \cdot B + B \cdot N_u^{\,2} - A \cdot B \cdot N_u\right]} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u \cdot \sqrt{\left[{N_u}^2 - N_u + \sqrt{-N_u \cdot \left[N_u + {N_u}^2 \cdot (N_u - 2) - 1\right] \cdot \left({N_u}^2 - N_u + 1\right)} + 1\right]^2} \cdot \left({N_u}^2 - N_u + 1\right)}{\sqrt{{N_u}^2 \cdot \left({N_u}^2 - N_u + 1\right)^2} \cdot \left[{N_u}^2 - N_u + \sqrt{-N_u \cdot \left[N_u + {N_u}^2 \cdot (N_u - 2) - 1\right] \cdot \left({N_u}^2 - N_u + 1\right)} + 1\right]}$$

1, 0:

$$\frac{N_u \cdot \sqrt{\left[A^2 + {N_u}^2 - A \cdot N_u + \sqrt{N_u \cdot \left[{N_u}^2 \cdot (A - N_u + 1) - A^2 \cdot (N_u - 1)\right] \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}\right]^2} \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}{\sqrt{{N_u}^2 \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)^2} \cdot \left[A^2 + {N_u}^2 - A \cdot N_u + \sqrt{N_u \cdot \left[{N_u}^2 \cdot (A - N_u + 1) - A^2 \cdot (N_u - 1)\right] \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}\right]}$$

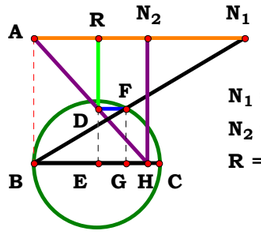
0, 2:

$$\frac{N_u \cdot \sqrt{\left[B \cdot \left({N_u}^2 - N_u + 1\right) + \sqrt{N_u \cdot \left({N_u}^2 - N_u + 1\right) \cdot \left[B - N_u + {N_u}^2 \cdot (B - N_u + 1)\right]}\right]^2} \cdot \left({N_u}^2 - N_u + 1\right)}{\sqrt{{N_u}^2 \cdot \left({N_u}^2 - N_u + 1\right)^2} \cdot \left[B - B \cdot N_u + \sqrt{N_u \cdot \left({N_u}^2 - N_u + 1\right) \cdot \left[B - N_u + {N_u}^2 \cdot (B - N_u + 1)\right]} + B \cdot {N_u}^2\right]}$$

1, 2:

$$\frac{N_u \cdot \sqrt{\left[B \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right) + \sqrt{N_u \cdot \left[A^2 \cdot (B - N_u) + {N_u}^2 \cdot (A + B - N_u)\right] \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}\right]^2} \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}{\sqrt{{N_u}^2 \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)^2} \cdot \left[\sqrt{N_u \cdot \left[A^2 \cdot (B - N_u) + {N_u}^2 \cdot (A + B - N_u)\right] \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)} + A^2 \cdot B + B \cdot {N_u}^2 - A \cdot B \cdot N_u\right]}$$

3OBT3R1



$N_1 = 1.68687$
$N_2 = 0.90909$
$R = 0.51031$

Unit. $AB := 1$ Given. $N_1 := 1.68687$ $N_2 := .90909$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}{B \cdot \left(A^2 + {N_u}^2\right)} = 0.510311$$

$$Num := \frac{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)\right]^2}}$$

$$Den := \frac{B \cdot \left(A^2 + {N_u}^2\right)}{\sqrt{\left[B \cdot \left(A^2 + {N_u}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2 + {N_u}^2\right)^2} \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}{B \cdot \sqrt{{N_u}^2 \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)^2} \cdot \left(A^2 + {N_u}^2\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}-N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}$$

1, 0:

$$\frac{N_u \cdot \sqrt{\left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)^2} \cdot \left(A^2+N_u^{\,2}\right)}$$

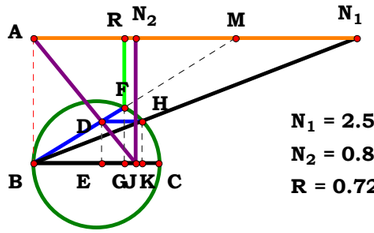
0, 2:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}-N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}$$

1, 2:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)^2} \cdot \left(A^2+N_u^{\,2}\right)}$$

3OBT3R2



$N_1 = 2.58586$

$N_2 = 0.81818$

$R = 0.72259$

Unit. $AB := 1$ **Given.** $N_1 := 2.58586$ $N_2 := .81818$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{\left(A^2 - A \cdot N_u + N_u^2\right)^2}{A^2 \cdot B^2 + N_u^4 + A \cdot (A - N_u) \cdot \left(A^2 - A \cdot N_u + 2 \cdot N_u^2\right)} = 0.722588$$

$$Num := \frac{\left(A^2 - A \cdot N_u + N_u^2\right)^2}{\sqrt{\left[\left(A^2 - A \cdot N_u + N_u^2\right)^2\right]^2}}$$

$$Den := \frac{A^2 \cdot B^2 + N_u^4 + A \cdot (A - N_u) \cdot \left(A^2 - A \cdot N_u + 2 \cdot N_u^2\right)}{\sqrt{\left[A^2 \cdot B^2 + N_u^4 + A \cdot (A - N_u) \cdot \left(A^2 - A \cdot N_u + 2 \cdot N_u^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left[N_u^4 + A^2 \cdot B^2 + A \cdot (A - N_u) \cdot \left(A^2 - A \cdot N_u + 2 \cdot N_u^2\right)\right]^2} \cdot \left(A^2 - A \cdot N_u + N_u^2\right)^2}{\sqrt{\left(A^2 - A \cdot N_u + N_u^2\right)^4} \cdot \left(A^4 - 2 \cdot A^3 \cdot N_u + A^2 \cdot B^2 + 3 \cdot A^2 \cdot N_u^2 - 2 \cdot A \cdot N_u^3 + N_u^4\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{\sqrt{\left[N_u^4-\left(N_u-1\right)\cdot\left(2\cdot N_u^2-N_u+1\right)+1\right]^2}\cdot\left(N_u^2-N_u+1\right)^2}{\sqrt{\left(N_u^2-N_u+1\right)^4}\cdot\left(N_u^4-2\cdot N_u^3+3\cdot N_u^2-2\cdot N_u+2\right)}$$

1, 0:

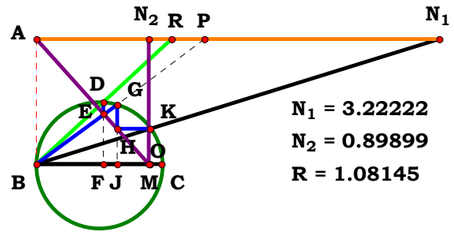
$$\frac{\sqrt{\left[A^2+N_u^4+A\cdot\left(A-N_u\right)\cdot\left(A^2-A\cdot N_u+2\cdot N_u^2\right)\right]^2}\cdot\left(A^2-A\cdot N_u+N_u^2\right)^2}{\sqrt{\left(A^2-A\cdot N_u+N_u^2\right)^4}\cdot\left(A^4-2\cdot A^3\cdot N_u+3\cdot A^2\cdot N_u^2+A^2-2\cdot A\cdot N_u^3+N_u^4\right)}$$

0, 2:

$$\frac{\sqrt{\left[B^2-\left(N_u-1\right)\cdot\left(2\cdot N_u^2-N_u+1\right)+N_u^4\right]^2}\cdot\left(N_u^2-N_u+1\right)^2}{\sqrt{\left(N_u^2-N_u+1\right)^4}\cdot\left(B^2+N_u^4-2\cdot N_u^3+3\cdot N_u^2-2\cdot N_u+1\right)}$$

1, 2:

$$\frac{\sqrt{\left[N_u^4+A^2\cdot B^2+A\cdot\left(A-N_u\right)\cdot\left(A^2-A\cdot N_u+2\cdot N_u^2\right)\right]^2}\cdot\left(A^2-A\cdot N_u+N_u^2\right)^2}{\sqrt{\left(A^2-A\cdot N_u+N_u^2\right)^4}\cdot\left(A^4-2\cdot A^3\cdot N_u+A^2\cdot B^2+3\cdot A^2\cdot N_u^2-2\cdot A\cdot N_u^3+N_u^4\right)}$$



Unit. $AB := 1$ Given. $N_1 := 3.22222$ $N_2 := .89899$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right) \cdot \left[\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right) \cdot \left(B \cdot A^2 - A^2 \cdot N_u + A \cdot {N_u}^2 - {N_u}^3 + B \cdot {N_u}^2\right)} + \left(A^2 - A \cdot N_u + {N_u}^2\right) \cdot \left(B - N_u\right)\right]}} = 1.081448$$

$$Num := \frac{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)\right]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right) \cdot \left[\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right) \cdot \left(B \cdot A^2 - A^2 \cdot N_u + A \cdot {N_u}^2 - {N_u}^3 + B \cdot {N_u}^2\right)} + \left(A^2 - A \cdot N_u + {N_u}^2\right) \cdot \left(B - N_u\right)\right]}}{\sqrt{\left[\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right) \cdot \left[\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right) \cdot \left(B \cdot A^2 - A^2 \cdot N_u + A \cdot {N_u}^2 - {N_u}^3 + B \cdot {N_u}^2\right)} + \left(A^2 - A \cdot N_u + {N_u}^2\right) \cdot \left(B - N_u\right)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}{\sqrt{{N_u}^2 \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)^2}} = 0$$

For 2 variables there are 4 subsets.

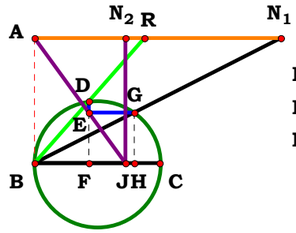
0, 0: $$\frac{N_u \cdot \left(N_u^{\,2} - N_u + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - N_u + 1\right)^2}}$$

1, 0: $$\frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)^2}}$$

0, 2: $$\frac{N_u \cdot \left(N_u^{\,2} - N_u + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - N_u + 1\right)^2}}$$

1, 2: $$\frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)^2}}$$

3OBT3R4



$N_1 = 1.96970$
$N_2 = 0.72727$
$R = 0.87514$

Unit. $AB := 1$ **Given.** $N_1 := 1.96970$ $N_2 := .72727$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right) \cdot \left[(A + B) \cdot {N_u}^2 - {N_u}^3 + \left(A^2 \cdot B - A^2 \cdot N_u\right)\right]}} = 0.875141$$

$$Num := \frac{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)\right]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right) \cdot \left[(A + B) \cdot {N_u}^2 - {N_u}^3 + \left(A^2 \cdot B - A^2 \cdot N_u\right)\right]}}{\sqrt{\left[\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right) \cdot \left[(A + B) \cdot {N_u}^2 - {N_u}^3 + \left(A^2 \cdot B - A^2 \cdot N_u\right)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}{\sqrt{{N_u}^2 \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)^2}} = 0$$

For 2 variables there are 4 subsets.

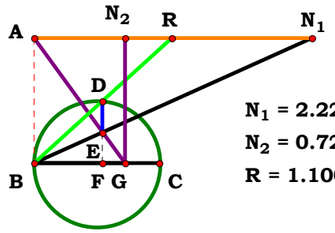
0, 0: $$\frac{N_u \cdot \left(N_u{}^2 - N_u + 1\right)}{\sqrt{N_u{}^2 \cdot \left(N_u{}^2 - N_u + 1\right)^2}}$$

1, 0: $$\frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u{}^2\right)}{\sqrt{N_u{}^2 \cdot \left(A^2 - A \cdot N_u + N_u{}^2\right)^2}}$$

0, 2: $$\frac{N_u \cdot \left(N_u{}^2 - N_u + 1\right)}{\sqrt{N_u{}^2 \cdot \left(N_u{}^2 - N_u + 1\right)^2}}$$

1, 2: $$\frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u{}^2\right)}{\sqrt{N_u{}^2 \cdot \left(A^2 - A \cdot N_u + N_u{}^2\right)^2}}$$

3OBT3R5



$N_1 = 2.22222$
$N_2 = 0.72727$
$R = 1.10096$

Unit. $AB := 1$ **Given.** $N_1 := 2.22222$ $N_2 := .72727$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u}{\sqrt{N_u \cdot (A + B - N_u)}} = 1.10096$$

$$Num := \frac{N_u}{\sqrt{(N_u)^2}}$$

$$Den := \frac{\sqrt{N_u \cdot (A + B - N_u)}}{\sqrt{\left[\sqrt{N_u \cdot (A + B - N_u)}\right]^2}}$$

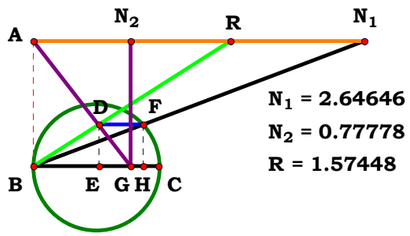
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u}{\sqrt{N_u{}^2}} = 0$$

3OBT3R6



Unit. $AB := 1$ Given. $N_1 := 2.64646$ $N_2 := .77778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A^2 - A \cdot N_u + N_u^2}{A \cdot B} = 1.574478$$

$$Num := \frac{A^2 - A \cdot N_u + N_u^2}{\sqrt{\left(A^2 - A \cdot N_u + N_u^2\right)^2}}$$

$$Den := \frac{A \cdot B}{\sqrt{(A \cdot B)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A^2 \cdot B^2} \cdot \left(A^2 - A \cdot N_u + N_u^2\right)}{A \cdot B \cdot \sqrt{\left(A^2 - A \cdot N_u + N_u^2\right)^2}} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u^{\,2} - N_u + 1}{\sqrt{\left(N_u^{\,2} - N_u + 1\right)^2}}$$

1, 0:

$$\frac{\sqrt{A^2}\cdot\left(A^2 - A\cdot N_u + N_u^{\,2}\right)}{A\cdot\sqrt{\left(A^2 - A\cdot N_u + N_u^{\,2}\right)^2}}$$

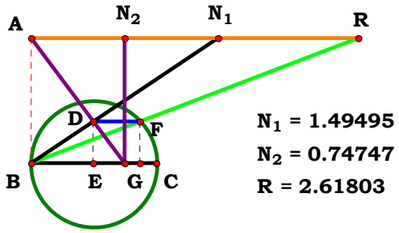
0, 2:

$$\frac{\sqrt{B^2}\cdot\left(N_u^{\,2} - N_u + 1\right)}{B\cdot\sqrt{\left(N_u^{\,2} - N_u + 1\right)^2}}$$

1, 2:

$$\frac{\sqrt{A^2\cdot B^2}\cdot\left(A^2 - A\cdot N_u + N_u^{\,2}\right)}{A\cdot B\cdot\sqrt{\left(A^2 - A\cdot N_u + N_u^{\,2}\right)^2}}$$

3OBT3R7



$N_1 = 1.49495$

$N_2 = 0.74747$

$R = 2.61803$

Unit. $AB := 1$ Given. $N_1 := 1.49495$ $N_2 := .74747$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A + B + \sqrt{2 \cdot A \cdot B - 3 \cdot A^2 + B^2}}{2 \cdot A} = 2.61805$$

$$Num := \frac{A + B + \sqrt{2 \cdot A \cdot B - 3 \cdot A^2 + B^2}}{\sqrt{\left(A + B + \sqrt{2 \cdot A \cdot B - 3 \cdot A^2 + B^2}\right)^2}}$$

$$Den := \frac{2 \cdot A}{\sqrt{(2 \cdot A)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A^2} \cdot \left(A + B + \sqrt{2 \cdot A \cdot B - 3 \cdot A^2 + B^2}\right)}{A \cdot \sqrt{\left(A + B + \sqrt{2 \cdot A \cdot B - 3 \cdot A^2 + B^2}\right)^2}} = 0$$

For 2 variables there are 4 subsets.

0, 0: 1

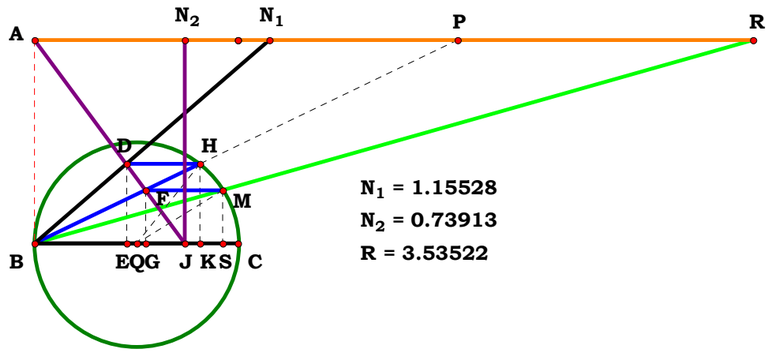
1, 0: $$\frac{\sqrt{A^2}\cdot\left(A+\sqrt{2\cdot A-3\cdot A^2+1}+1\right)}{A\cdot\sqrt{\left(A+\sqrt{2\cdot A-3\cdot A^2+1}+1\right)^2}}$$

0, 2: $$\frac{B+\sqrt{B^2+2\cdot B-3}+1}{\sqrt{\left(B+\sqrt{B^2+2\cdot B-3}+1\right)^2}}$$

1, 2: $$\frac{\sqrt{A^2}\cdot\left(A+B+\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}\right)}{A\cdot\sqrt{\left(A+B+\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}\right)^2}}$$

3OBT3R8

Descriptions.



Unit. $AB := 1$ **Given.** $N_1 := 1.15528$ $N_2 := .73913$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

$$\frac{\frac{\sqrt{2}}{4}\cdot\left[\begin{array}{l}\sqrt{N_u{}^3\cdot(A+B)}\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+\left[2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B+A\cdot N_u\right)+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)\right]\right]\ \ldots\\ +\sqrt{N_u{}^3\cdot(A+B)}\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+\left[2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B-3\cdot A\cdot N_u\right)+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)\right]\right]\end{array}\right]}{N_u{}^2\cdot\sqrt{N_u\cdot(A+B)}\cdot A} = 3.535223$$

$$\text{Num} := \frac{\frac{\sqrt{2}}{4}\cdot\left[\begin{array}{l}\sqrt{N_u{}^3\cdot(A+B)}\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+\left[2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B+A\cdot N_u\right)+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)\right]\right]\ \ldots\\ +\sqrt{N_u{}^3\cdot(A+B)}\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+\left[2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B-3\cdot A\cdot N_u\right)+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)\right]\right]\end{array}\right]}{\sqrt{\left[\frac{\sqrt{2}}{4}\cdot\left[\begin{array}{l}\sqrt{N_u{}^3\cdot(A+B)}\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+\left[2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B+A\cdot N_u\right)+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)\right]\right]\ \ldots\\ +\sqrt{N_u{}^3\cdot(A+B)}\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+\left[2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B-3\cdot A\cdot N_u\right)+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)\right]\right]\end{array}\right]\right]^2}}$$

$$\text{Den} := \frac{N_u{}^2\cdot\sqrt{N_u\cdot(A+B)}\cdot A}{\sqrt{\left[N_u{}^2\cdot\sqrt{N_u\cdot(A+B)}\cdot A\right]^2}} \qquad L := \frac{\text{Num}}{\text{Den}}$$

Definitions.

$\text{Num} = 1$ $\text{Den} = 1$ $L = 1$

$$L - \frac{\frac{\sqrt{2}}{4}\cdot\left[\begin{array}{l}\sqrt{N_u{}^3\cdot(A+B)}\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)+2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B+A\cdot N_u\right)\right]\ \ldots\\ +\sqrt{N_u{}^3\cdot(A+B)}\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)+2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B-3\cdot A\cdot N_u\right)\right]\end{array}\right]\cdot\sqrt{A^2\cdot N_u{}^5\cdot(A+B)}}{A\cdot N_u{}^2\cdot\sqrt{\frac{\left[\begin{array}{l}\sqrt{N_u{}^3\cdot(A+B)}\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)+2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B+A\cdot N_u\right)\right]\ \ldots\\ +\sqrt{N_u{}^3\cdot(A+B)}\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)-2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B-3\cdot A\cdot N_u\right)\right]\end{array}\right]^2}{8}}\cdot\sqrt{N_u\cdot(A+B)}} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{\sqrt{2}\cdot\sqrt{N_u^{\,5}}\cdot\left[\sqrt{2}\cdot\sqrt{N_u^{\,3}\cdot\left[2\cdot N_u\cdot\left(N_u+2\right)+2\right]}+\sqrt{2}\cdot\sqrt{-N_u^{\,3}\cdot\left[2\cdot N_u\cdot\left(3\cdot N_u-2\right)-2\right]}\right]}{4\cdot N_u^{\,\frac{5}{2}}\cdot\sqrt{\frac{\left[\sqrt{2}\cdot\sqrt{N_u^{\,3}\cdot\left[2\cdot N_u\cdot\left(N_u+2\right)+2\right]}+\sqrt{2}\cdot\sqrt{-N_u^{\,3}\cdot\left[2\cdot N_u\cdot\left(3\cdot N_u-2\right)-2\right]}\right]^2}{8}}}$$

1, 0:

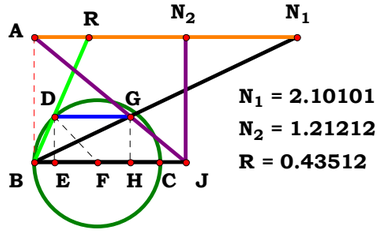
$$\frac{\sqrt{2}\cdot\left[\begin{array}{l}\sqrt{N_u^{\,3}\cdot(A+1)\cdot\left[2\cdot A-A^2+\left(A+2\cdot A\cdot N_u+1\right)\cdot\sqrt{2\cdot A-3\cdot A^2+1}+2\cdot A\cdot N_u\cdot\left(A+A\cdot N_u+1\right)+1\right]}\ \ldots\\ +\sqrt{N_u^{\,3}\cdot(A+1)\cdot\left[2\cdot A-A^2+\left(A+2\cdot A\cdot N_u+1\right)\cdot\sqrt{2\cdot A-3\cdot A^2+1}+2\cdot A\cdot N_u\cdot\left(A-3\cdot A\cdot N_u+1\right)+1\right]}\end{array}\right]\cdot\sqrt{A^2\cdot N_u^{\,5}\cdot(A+1)}}{4\cdot A\cdot N_u^{\,2}\cdot\sqrt{\frac{\left[\begin{array}{l}\sqrt{N_u^{\,3}\cdot(A+1)\cdot\left[2\cdot A-A^2+\left(A+2\cdot A\cdot N_u+1\right)\cdot\sqrt{2\cdot A-3\cdot A^2+1}+2\cdot A\cdot N_u\cdot\left(A+A\cdot N_u+1\right)+1\right]}\ \ldots\\ +\sqrt{N_u^{\,3}\cdot(A+1)\cdot\left[2\cdot A-A^2+\left(A+2\cdot A\cdot N_u+1\right)\cdot\sqrt{2\cdot A-3\cdot A^2+1}+2\cdot A\cdot N_u\cdot\left(A-3\cdot A\cdot N_u+1\right)+1\right]}\end{array}\right]^2}{8}}}\cdot\sqrt{N_u\cdot(A+1)}$$

0, 2:

$$\frac{\sqrt{2}\cdot\sqrt{N_u^{\,5}\cdot(B+1)}\cdot\left[\begin{array}{l}\sqrt{N_u^{\,3}\cdot(B+1)\cdot\left[\sqrt{B^2+2\cdot B-3}\cdot\left(B^3+B^2+2\cdot N_u\cdot B\right)+B^2\cdot\left(B^2+2\cdot B-1\right)+2\cdot N_u\cdot\left(B^2+B+N_u\right)\right]}\ \ldots\\ +\sqrt{N_u^{\,3}\cdot(B+1)\cdot\left[\sqrt{B^2+2\cdot B-3}\cdot\left(B^3+B^2+2\cdot N_u\cdot B\right)+2\cdot N_u\cdot\left(B^2+B-3\cdot N_u\right)+B^2\cdot\left(B^2+2\cdot B-1\right)\right]}\end{array}\right]}{4\cdot N_u^{\,2}\cdot\sqrt{\frac{\left[\begin{array}{l}\sqrt{N_u^{\,3}\cdot(B+1)\cdot\left[\sqrt{B^2+2\cdot B-3}\cdot\left(B^3+B^2+2\cdot N_u\cdot B\right)+B^2\cdot\left(B^2+2\cdot B-1\right)+2\cdot N_u\cdot\left(B^2+B+N_u\right)\right]}\ \ldots\\ +\sqrt{N_u^{\,3}\cdot(B+1)\cdot\left[\sqrt{B^2+2\cdot B-3}\cdot\left(B^3+B^2+2\cdot N_u\cdot B\right)+2\cdot N_u\cdot\left(B^2+B-3\cdot N_u\right)+B^2\cdot\left(B^2+2\cdot B-1\right)\right]}\end{array}\right]^2}{8}}}\cdot\sqrt{N_u\cdot(B+1)}$$

1, 2:

$$\frac{\frac{\sqrt{2}}{4}\cdot\left[\begin{array}{l}\sqrt{N_u^{\,3}\cdot(A+B)\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)+2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B+A\cdot N_u\right)\right]}\ \ldots\\ +\sqrt{N_u^{\,3}\cdot(A+B)\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)+2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B-3\cdot A\cdot N_u\right)\right]}\end{array}\right]\cdot\sqrt{A^2\cdot N_u^{\,5}\cdot(A+B)}}{A\cdot N_u^{\,2}\cdot\sqrt{\frac{\left[\begin{array}{l}\sqrt{N_u^{\,3}\cdot(A+B)\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)+2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B+A\cdot N_u\right)\right]}\ \ldots\\ +\sqrt{N_u^{\,3}\cdot(A+B)\cdot\left[\left(B^3+A\cdot B^2+2\cdot A\cdot N_u\cdot B\right)\cdot\sqrt{2\cdot A\cdot B-3\cdot A^2+B^2}+B^2\cdot\left(2\cdot A\cdot B-A^2+B^2\right)+2\cdot A\cdot N_u\cdot\left(B^2+A\cdot B-3\cdot A\cdot N_u\right)\right]}\end{array}\right]^2}{8}}}\cdot\sqrt{N_u\cdot(A+B)}$$



$N_1 = 2.10101$
$N_2 = 1.21212$
$R = 0.43512$

Unit. $AB := 1$ **Given.** $N_1 := 2.10101$ $N_2 := 1.21212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A + B - \sqrt{(B - A) \cdot (3 \cdot A + B)}}{2 \cdot A} = 0.43512$$

$$Num := \frac{A + B - \sqrt{(B - A) \cdot (3 \cdot A + B)}}{\sqrt{\left[A + B - \sqrt{(B - A) \cdot (3 \cdot A + B)}\right]^2}}$$

$$Den := \frac{2 \cdot A}{\sqrt{(2 \cdot A)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A^2} \cdot \left[A + B - \sqrt{-(A - B) \cdot (3 \cdot A + B)}\right]}{A \cdot \sqrt{\left[A + B - \sqrt{-(A - B) \cdot (3 \cdot A + B)}\right]^2}} = 0$$

For 2 variables there are 4 subsets.

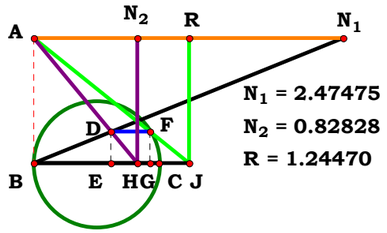
0, 0: 1

1, 0: $$\frac{\sqrt{A^2}\cdot\left[A-\sqrt{-(A-1)\cdot(3\cdot A+1)}+1\right]}{A\cdot\sqrt{\left[A-\sqrt{-(A-1)\cdot(3\cdot A+1)}+1\right]^2}}$$

0, 2: $$\frac{B-\sqrt{(B-1)\cdot(B+3)}+1}{\sqrt{\left[B-\sqrt{(B-1)\cdot(B+3)}+1\right]^2}}$$

1, 2: $$\frac{\sqrt{A^2}\cdot\left[A+B-\sqrt{-(A-B)\cdot(3\cdot A+B)}\right]}{A\cdot\sqrt{\left[A+B-\sqrt{-(A-B)\cdot(3\cdot A+B)}\right]^2}}$$

3OBT3R10



$N_1 = 2.47475$

$N_2 = 0.82828$

$R = 1.24470$

Unit. $AB := 1$ Given. $N_1 := 2.13803$ $N_2 := .74817$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A + B + \sqrt{(B - A) \cdot (3 \cdot A + B)}}{2 \cdot B} = 1.252138$$

$$Num := \frac{A + B + \sqrt{(B - A) \cdot (3 \cdot A + B)}}{\sqrt{\left[A + B + \sqrt{(B - A) \cdot (3 \cdot A + B)}\right]^2}}$$

$$Den := \frac{2 \cdot B}{\sqrt{(2 \cdot B)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2} \cdot \left[A + B + \sqrt{-(A - B) \cdot (3 \cdot A + B)}\right]}{B \cdot \sqrt{\left[A + B + \sqrt{-(A - B) \cdot (3 \cdot A + B)}\right]^2}} = 0$$

For 2 variables there are 4 subsets.

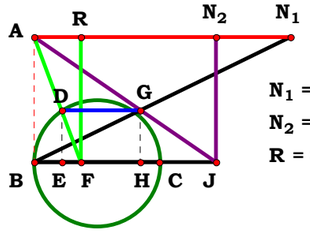
0, 0: $\mathbf{1}$

1, 0: $$\frac{\mathbf{A}+\sqrt{-(\mathbf{A}-\mathbf{1})\cdot(\mathbf{3}\cdot\mathbf{A}+\mathbf{1})}+\mathbf{1}}{\sqrt{\left[\mathbf{A}+\sqrt{-(\mathbf{A}-\mathbf{1})\cdot(\mathbf{3}\cdot\mathbf{A}+\mathbf{1})}+\mathbf{1}\right]^{\mathbf{2}}}}$$

0, 2: $$\frac{\sqrt{\mathbf{B}^{\mathbf{2}}}\cdot\left[\mathbf{B}+\sqrt{(\mathbf{B}-\mathbf{1})\cdot(\mathbf{B}+\mathbf{3})}+\mathbf{1}\right]}{\mathbf{B}\cdot\sqrt{\left[\mathbf{B}+\sqrt{(\mathbf{B}-\mathbf{1})\cdot(\mathbf{B}+\mathbf{3})}+\mathbf{1}\right]^{\mathbf{2}}}}$$

1, 2: $$\frac{\sqrt{\mathbf{B}^{\mathbf{2}}}\cdot\left[\mathbf{A}+\mathbf{B}+\sqrt{-(\mathbf{A}-\mathbf{B})\cdot(\mathbf{3}\cdot\mathbf{A}+\mathbf{B})}\right]}{\mathbf{B}\cdot\sqrt{\left[\mathbf{A}+\mathbf{B}+\sqrt{-(\mathbf{A}-\mathbf{B})\cdot(\mathbf{3}\cdot\mathbf{A}+\mathbf{B})}\right]^{\mathbf{2}}}}$$

3OBT3R11



$N_1 = 2.05051$

$N_2 = 1.45455$

$R = 0.37793$

Unit. $AB := 1$ **Given.** $N_1 := 2.05051$ $N_2 := 1.45455$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A + B - \sqrt{[(B - A) \cdot (3 \cdot A + B)]}}{2 \cdot B} = 0.377935$$

$$Num := \frac{A + B - \sqrt{[(B - A) \cdot (3 \cdot A + B)]}}{\sqrt{\left[A + B - \sqrt{[(B - A) \cdot (3 \cdot A + B)]}\right]^2}}$$

$$Den := \frac{2 \cdot B}{\sqrt{(2 \cdot B)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2} \cdot \left[A + B - \sqrt{-(A - B) \cdot (3 \cdot A + B)}\right]}{B \cdot \sqrt{\left[A + B - \sqrt{-(A - B) \cdot (3 \cdot A + B)}\right]^2}} = 0$$

For 2 variables there are 4 subsets.

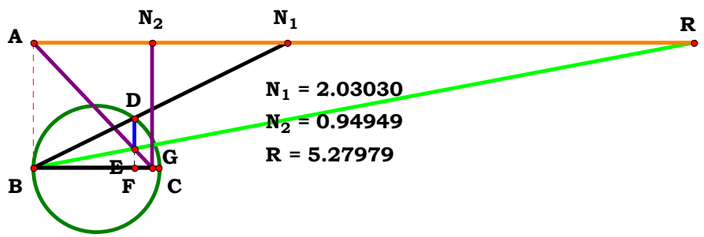
0, 0: 1

1, 0: $$\frac{\mathbf{A}-\sqrt{-(\mathbf{A}-\mathbf{1})\cdot(\mathbf{3}\cdot\mathbf{A}+\mathbf{1})}+\mathbf{1}}{\sqrt{\left[\mathbf{A}-\sqrt{-(\mathbf{A}-\mathbf{1})\cdot(\mathbf{3}\cdot\mathbf{A}+\mathbf{1})}+\mathbf{1}\right]^{\mathbf{2}}}}$$

0, 2: $$\frac{\sqrt{\mathbf{B}^{\mathbf{2}}}\cdot\left[\mathbf{B}-\sqrt{(\mathbf{B}-\mathbf{1})\cdot(\mathbf{B}+\mathbf{3})}+\mathbf{1}\right]}{\mathbf{B}\cdot\sqrt{\left[\mathbf{B}-\sqrt{(\mathbf{B}-\mathbf{1})\cdot(\mathbf{B}+\mathbf{3})}+\mathbf{1}\right]^{\mathbf{2}}}}$$

1, 2: $$\frac{\sqrt{\mathbf{B}^{\mathbf{2}}}\cdot\left[\mathbf{A}+\mathbf{B}-\sqrt{-(\mathbf{A}-\mathbf{B})\cdot(\mathbf{3}\cdot\mathbf{A}+\mathbf{B})}\right]}{\mathbf{B}\cdot\sqrt{\left[\mathbf{A}+\mathbf{B}-\sqrt{-(\mathbf{A}-\mathbf{B})\cdot(\mathbf{3}\cdot\mathbf{A}+\mathbf{B})}\right]^{\mathbf{2}}}}$$

3OBT3R12



Unit. $AB := 1$ Given. $N_1 := 2.03030$ $N_2 := .94949$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u^2}{A^2 + N_u^2 - B \cdot N_u} = 5.279922$$

$$Num := \frac{N_u^2}{\sqrt{\left(N_u^2\right)^2}}$$

$$Den := \frac{A^2 + N_u^2 - B \cdot N_u}{\sqrt{\left(A^2 + N_u^2 - B \cdot N_u\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \sqrt{\left(A^2 + N_u^2 - B \cdot N_u\right)^2}}{\sqrt{N_u^4} \cdot \left(A^2 + N_u^2 - B \cdot N_u\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-N_u+1\right)}$$

1, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}-N_u\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}-N_u\right)}$$

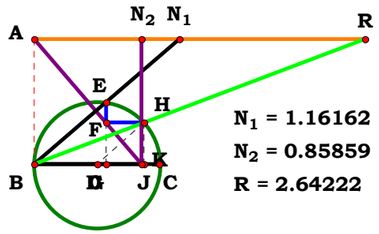
0, 2:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-B\cdot N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-B\cdot N_u+1\right)}$$

1, 2:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}-B\cdot N_u\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}-B\cdot N_u\right)}$$

3OBT3R13



Unit. $AB := 1$ Given. $N_1 := 1.16162$ $N_2 := .85859$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{\sqrt{\left(3\cdot A^2+3\cdot N_u{}^2-2\cdot B\cdot N_u\right)\cdot\left(2\cdot B\cdot N_u-N_u{}^2-A^2\right)}+A^2+N_u{}^2}{2\cdot\left(A^2+N_u{}^2-B\cdot N_u\right)} = 2.642205$$

$$Num := \frac{\sqrt{\left(3\cdot A^2+3\cdot N_u{}^2-2\cdot B\cdot N_u\right)\cdot\left(2\cdot B\cdot N_u-N_u{}^2-A^2\right)}+A^2+N_u{}^2}{\sqrt{\left[\sqrt{\left(3\cdot A^2+3\cdot N_u{}^2-2\cdot B\cdot N_u\right)\cdot\left(2\cdot B\cdot N_u-N_u{}^2-A^2\right)}+A^2+N_u{}^2\right]^2}}$$

$$Den := \frac{2\cdot\left(A^2+N_u{}^2-B\cdot N_u\right)}{\sqrt{\left[2\cdot\left(A^2+N_u{}^2-B\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{\left(2\cdot A^2+2\cdot N_u{}^2-2\cdot B\cdot N_u\right)^2}\cdot\left[\sqrt{-\left(3\cdot A^2+3\cdot N_u{}^2-2\cdot B\cdot N_u\right)\cdot\left(A^2+N_u{}^2-2\cdot B\cdot N_u\right)}+A^2+N_u{}^2\right]}{2\cdot\sqrt{\left[\sqrt{-\left(3\cdot A^2+3\cdot N_u{}^2-2\cdot B\cdot N_u\right)\cdot\left(A^2+N_u{}^2-2\cdot B\cdot N_u\right)}+A^2+N_u{}^2\right]^2}\cdot\left(A^2+N_u{}^2-B\cdot N_u\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{\sqrt{\left(2\cdot N_u{}^2-2\cdot N_u+2\right)^2}\cdot\left[N_u{}^2+\sqrt{-\left(N_u{}^2-2\cdot N_u+1\right)\cdot\left(3\cdot N_u{}^2-2\cdot N_u+3\right)}+1\right]}{2\cdot\sqrt{\left[N_u{}^2+\sqrt{-\left(N_u{}^2-2\cdot N_u+1\right)\cdot\left(3\cdot N_u{}^2-2\cdot N_u+3\right)}+1\right]^2}\cdot\left(N_u{}^2-N_u+1\right)}$$

1, 0:

$$\frac{\sqrt{\left(2\cdot A^2+2\cdot N_u{}^2-2\cdot N_u\right)^2}\cdot\left[A^2+N_u{}^2+\sqrt{-\left(3\cdot A^2+3\cdot N_u{}^2-2\cdot N_u\right)\cdot\left(A^2+N_u{}^2-2\cdot N_u\right)}\right]}{2\cdot\sqrt{\left[A^2+N_u{}^2+\sqrt{-\left(3\cdot A^2+3\cdot N_u{}^2-2\cdot N_u\right)\cdot\left(A^2+N_u{}^2-2\cdot N_u\right)}\right]^2}\cdot\left(A^2+N_u{}^2-N_u\right)}$$

0, 2:

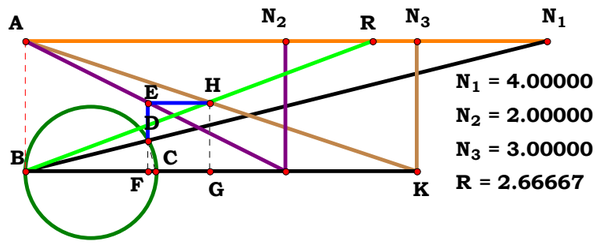
$$\frac{\sqrt{\left(2\cdot N_u{}^2-2\cdot B\cdot N_u+2\right)^2}\cdot\left[\sqrt{-\left(3\cdot N_u{}^2-2\cdot B\cdot N_u+3\right)\cdot\left(N_u{}^2-2\cdot B\cdot N_u+1\right)}+N_u{}^2+1\right]}{2\cdot\sqrt{\left[\sqrt{-\left(3\cdot N_u{}^2-2\cdot B\cdot N_u+3\right)\cdot\left(N_u{}^2-2\cdot B\cdot N_u+1\right)}+N_u{}^2+1\right]^2}\cdot\left(N_u{}^2-B\cdot N_u+1\right)}$$

1, 2:

$$\frac{\sqrt{\left(2\cdot A^2+2\cdot N_u{}^2-2\cdot B\cdot N_u\right)^2}\cdot\left[\sqrt{-\left(3\cdot A^2+3\cdot N_u{}^2-2\cdot B\cdot N_u\right)\cdot\left(A^2+N_u{}^2-2\cdot B\cdot N_u\right)}+A^2+N_u{}^2\right]}{2\cdot\sqrt{\left[\sqrt{-\left(3\cdot A^2+3\cdot N_u{}^2-2\cdot B\cdot N_u\right)\cdot\left(A^2+N_u{}^2-2\cdot B\cdot N_u\right)}+A^2+N_u{}^2\right]^2}\cdot\left(A^2+N_u{}^2-B\cdot N_u\right)}$$

3OBT3R14

Descriptions.



Unit. $AB := 1$ **Given.** $N_1 := 4$ $N_2 := 2$ $N_3 := 3$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$$\frac{B \cdot N_u^{\,2}}{C \cdot \left(A^2 + N_u^{\,2} - B \cdot N_u\right)} = 2.666667$$

$$Num := \frac{B \cdot N_u^{\,2}}{\sqrt{\left(B \cdot N_u^{\,2}\right)^2}}$$

$$Den := \frac{C \cdot \left(A^2 + N_u^{\,2} - B \cdot N_u\right)}{\sqrt{\left[C \cdot \left(A^2 + N_u^{\,2} - B \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u^{\,2} \cdot \sqrt{C^2 \cdot \left(A^2 + N_u^{\,2} - B \cdot N_u\right)^2}}{C \cdot \sqrt{B^2 \cdot N_u^{\,4}} \cdot \left(A^2 + N_u^{\,2} - B \cdot N_u\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-N_u+1\right)}$$

0, 0, 3:

$$\frac{N_u^{\,2}\cdot\sqrt{C^2\cdot\left(N_u^{\,2}-N_u+1\right)^2}}{C\cdot\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-N_u+1\right)}$$

1, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}-N_u\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}-N_u\right)}$$

1, 0, 3:

$$\frac{N_u^{\,2}\cdot\sqrt{C^2\cdot\left(A^2+N_u^{\,2}-N_u\right)^2}}{C\cdot\sqrt{N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}-N_u\right)}$$

0, 2, 0:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-B\cdot N_u+1\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(N_u^{\,2}-B\cdot N_u+1\right)}$$

0, 2, 3:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{C^2\cdot\left(N_u^{\,2}-B\cdot N_u+1\right)^2}}{C\cdot\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(N_u^{\,2}-B\cdot N_u+1\right)}$$

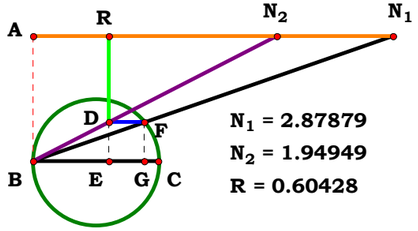
1, 2, 0:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}-B\cdot N_u\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}-B\cdot N_u\right)}$$

1, 2, 3:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{C^2\cdot\left(A^2+N_u^{\,2}-B\cdot N_u\right)^2}}{C\cdot\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}-B\cdot N_u\right)}$$

3OBT4R0



Unit. $AB := 1$ Given. $N_1 := 2.87879$ $N_2 := 1.94949$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$\frac{A \cdot N_u^2}{B \cdot \left(A^2 + N_u^2\right)} = 0.604276$

$Num := \frac{A \cdot N_u^2}{\sqrt{\left(A \cdot N_u^2\right)^2}}$

$Den := \frac{B \cdot \left(A^2 + N_u^2\right)}{\sqrt{\left[B \cdot \left(A^2 + N_u^2\right)\right]^2}}$

$L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$L - \frac{A \cdot N_u^2 \cdot \sqrt{B^2 \cdot \left(A^2 + N_u^2\right)^2}}{B \cdot \sqrt{A^2 \cdot N_u^4} \cdot \left(A^2 + N_u^2\right)} = 0$

For 2 variables there are 4 subsets.

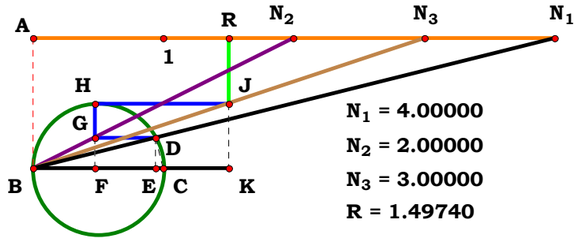
0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}+1\right)}$$

1, 0: $$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}\right)}$$

0, 2: $$\frac{N_u^{\,2}\cdot\sqrt{B^2\cdot\left(N_u^{\,2}+1\right)^2}}{B\cdot\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}+1\right)}$$

1, 2: $$\frac{A\cdot N_u^{\,2}\cdot\sqrt{B^2\cdot\left(A^2+N_u^{\,2}\right)^2}}{B\cdot\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}\right)}$$

3OBT4R1



Unit. $AB := 1$ **Given.** $N_1 := 4$ $N_2 := 2$ $N_3 := 3$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A}\cdot N_u^{\,2}\cdot\sqrt{B\cdot A^2 - A\cdot N_u^{\,2} + B\cdot N_u^{\,2}}}{B\cdot C\cdot\left(A^2 + N_u^{\,2}\right)} = 1.497403$$

$$Num := \frac{\sqrt{A}\cdot N_u^{\,2}\cdot\sqrt{B\cdot A^2 - A\cdot N_u^{\,2} + B\cdot N_u^{\,2}}}{\sqrt{\left(\sqrt{A}\cdot N_u^{\,2}\cdot\sqrt{B\cdot A^2 - A\cdot N_u^{\,2} + B\cdot N_u^{\,2}}\right)^2}}$$

$$Den := \frac{B\cdot C\cdot\left(A^2 + N_u^{\,2}\right)}{\sqrt{\left[B\cdot C\cdot\left(A^2 + N_u^{\,2}\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A}\cdot N_u^{\,2}\cdot\sqrt{B\cdot A^2 - A\cdot N_u^{\,2} + B\cdot N_u^{\,2}}\cdot\sqrt{B^2\cdot C^2\cdot\left(A^2 + N_u^{\,2}\right)^2}}{B\cdot C\cdot\left(A^2 + N_u^{\,2}\right)\cdot\sqrt{A\cdot N_u^{\,4}\cdot\left(B\cdot A^2 - A\cdot N_u^{\,2} + B\cdot N_u^{\,2}\right)}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}+1\right)}$$

1, 0, 0:

$$\frac{\sqrt{A}\cdot N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}\cdot\sqrt{A^2-A\cdot N_u^{\,2}+N_u^{\,2}}}{\left(A^2+N_u^{\,2}\right)\cdot\sqrt{A\cdot N_u^{\,4}\cdot\left(A^2-A\cdot N_u^{\,2}+N_u^{\,2}\right)}}$$

0, 2, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{B^2\cdot\left(N_u^{\,2}+1\right)^2}\cdot\sqrt{B-N_u^{\,2}+B\cdot N_u^{\,2}}}{B\cdot\sqrt{N_u^{\,4}\cdot\left(B-N_u^{\,2}+B\cdot N_u^{\,2}\right)}\cdot\left(N_u^{\,2}+1\right)}$$

1, 2, 0:

$$\frac{\sqrt{A}\cdot N_u^{\,2}\cdot\sqrt{B^2\cdot\left(A^2+N_u^{\,2}\right)^2}\cdot\sqrt{B\cdot A^2-A\cdot N_u^{\,2}+B\cdot N_u^{\,2}}}{B\cdot\left(A^2+N_u^{\,2}\right)\cdot\sqrt{A\cdot N_u^{\,4}\cdot\left(B\cdot A^2-A\cdot N_u^{\,2}+B\cdot N_u^{\,2}\right)}}$$

0, 0, 3:

$$\frac{N_u^{\,2}\cdot\sqrt{C^2\cdot\left(N_u^{\,2}+1\right)^2}}{C\cdot\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}+1\right)}$$

1, 0, 3:

$$\frac{\sqrt{A}\cdot N_u^{\,2}\cdot\sqrt{C^2\cdot\left(A^2+N_u^{\,2}\right)^2}\cdot\sqrt{A^2-A\cdot N_u^{\,2}+N_u^{\,2}}}{C\cdot\left(A^2+N_u^{\,2}\right)\cdot\sqrt{A\cdot N_u^{\,4}\cdot\left(A^2-A\cdot N_u^{\,2}+N_u^{\,2}\right)}}$$

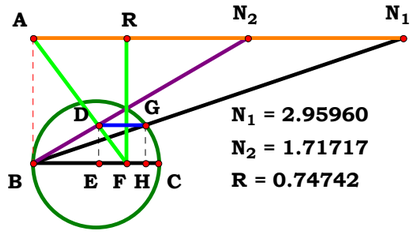
0, 2, 3:

$$\frac{N_u^{\,2}\cdot\sqrt{B^2\cdot C^2\cdot\left(N_u^{\,2}+1\right)^2}\cdot\sqrt{B-N_u^{\,2}+B\cdot N_u^{\,2}}}{B\cdot C\cdot\sqrt{N_u^{\,4}\cdot\left(B-N_u^{\,2}+B\cdot N_u^{\,2}\right)}\cdot\left(N_u^{\,2}+1\right)}$$

1, 2, 3:

$$\frac{\sqrt{A}\cdot N_u^{\,2}\cdot\sqrt{B\cdot A^2-A\cdot N_u^{\,2}+B\cdot N_u^{\,2}}\cdot\sqrt{B^2\cdot C^2\cdot\left(A^2+N_u^{\,2}\right)^2}}{B\cdot C\cdot\left(A^2+N_u^{\,2}\right)\cdot\sqrt{A\cdot N_u^{\,4}\cdot\left(B\cdot A^2-A\cdot N_u^{\,2}+B\cdot N_u^{\,2}\right)}}$$

3OBT4R2



Unit. $AB := 1$ **Given.** $N_1 := 2.9596$ $N_2 := 1.71717$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A \cdot N_u^{\,2}}{B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)} = 0.747413$$

$$Num := \frac{A \cdot N_u^{\,2}}{\sqrt{\left(A \cdot N_u^{\,2}\right)^2}}$$

$$Den := \frac{B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{\left[B \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u^{\,2} \cdot \sqrt{B^2 \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)^2}}{B \cdot \sqrt{A^2 \cdot N_u^{\,4}} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)} = 0$$

For 2 variables there are 4 subsets.

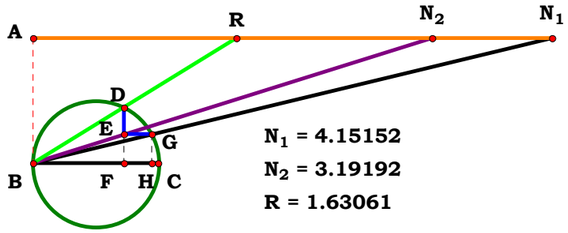
0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-N_u+1\right)}$$

1, 0: $$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left(A^2-A\cdot N_u+N_u^{\,2}\right)^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)}$$

0, 2: $$\frac{N_u^{\,2}\cdot\sqrt{B^2\cdot\left(N_u^{\,2}-N_u+1\right)^2}}{B\cdot\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-N_u+1\right)}$$

1, 2: $$\frac{A\cdot N_u^{\,2}\cdot\sqrt{B^2\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)^2}}{B\cdot\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)}$$

3OBT4R3



Unit. $AB := 1$ Given. $N_1 := 4.15152$ $N_2 := 3.19192$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A \cdot N_u}{\sqrt{N_u^2 \cdot A \cdot (B - A) + A^3 \cdot B}} = 1.630607$$

$$Num := \frac{A \cdot N_u}{\sqrt{(A \cdot N_u)^2}}$$

$$Den := \frac{\sqrt{N_u^2 \cdot A \cdot (B - A) + A^3 \cdot B}}{\sqrt{\left[\sqrt{N_u^2 \cdot A \cdot (B - A) + A^3 \cdot B}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u}{\sqrt{A^2 \cdot N_u^2}} = 0$$

For 2 variables there are 4 subsets.

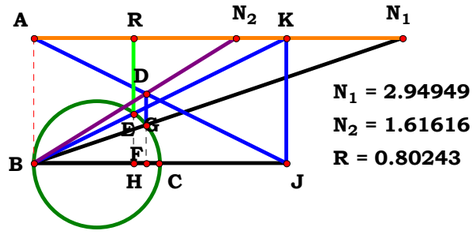
0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0: $\frac{A \cdot N_u}{\sqrt{A^2 \cdot N_u^2}}$

0, 2: $\frac{N_u}{\sqrt{N_u^2}}$

1, 2: $\frac{A \cdot N_u}{\sqrt{A^2 \cdot N_u^2}}$

3OBT4R4



Unit. $AB := 1$ Given. $N_1 := 2.94949$ $N_2 := 1.61616$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u^4}{N_u^2 \cdot B^2 - 2 \cdot B \cdot N_u \cdot \left(A^2 + N_u^2\right) + A^4 + 2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)} = 0.802431$$

$$Num := \frac{N_u^4}{\sqrt{\left(N_u^4\right)^2}}$$

$$Den := \frac{N_u^2 \cdot B^2 - 2 \cdot B \cdot N_u \cdot \left(A^2 + N_u^2\right) + A^4 + 2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)}{\sqrt{\left[N_u^2 \cdot B^2 - 2 \cdot B \cdot N_u \cdot \left(A^2 + N_u^2\right) + A^4 + 2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^4 \cdot \sqrt{\left[A^4 + B^2 \cdot N_u^2 + 2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right) - 2 \cdot B \cdot N_u \cdot \left(A^2 + N_u^2\right)\right]^2}}{\sqrt{N_u^8} \cdot \left(A^4 - 2 \cdot A^2 \cdot B \cdot N_u + 2 \cdot A^2 \cdot N_u^2 + B^2 \cdot N_u^2 - 2 \cdot B \cdot N_u^3 + 2 \cdot N_u^4\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u^4 \cdot \sqrt{\left[N_u^2 - 2 \cdot N_u \cdot \left(N_u^2 + 1\right) + 2 \cdot N_u^2 \cdot \left(N_u^2 + 1\right) + 1\right]^2}}{\sqrt{N_u^8} \cdot \left(2 \cdot N_u^4 - 2 \cdot N_u^3 + 3 \cdot N_u^2 - 2 \cdot N_u + 1\right)}$$

1, 0:

$$\frac{N_u^4 \cdot \sqrt{\left[A^4 - 2 \cdot N_u \cdot \left(A^2 + N_u^2\right) + N_u^2 + 2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right)\right]^2}}{\sqrt{N_u^8} \cdot \left(A^4 + 2 \cdot A^2 \cdot N_u^2 - 2 \cdot A^2 \cdot N_u + 2 \cdot N_u^4 - 2 \cdot N_u^3 + N_u^2\right)}$$

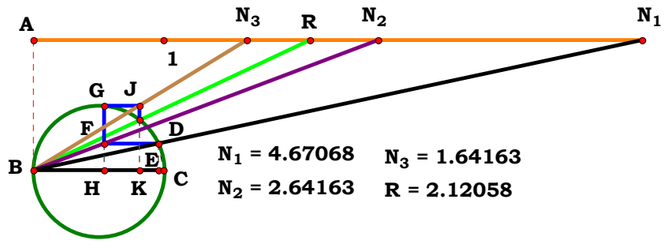
0, 2:

$$\frac{N_u^4 \cdot \sqrt{\left[B^2 \cdot N_u^2 + 2 \cdot N_u^2 \cdot \left(N_u^2 + 1\right) - 2 \cdot B \cdot N_u \cdot \left(N_u^2 + 1\right) + 1\right]^2}}{\sqrt{N_u^8} \cdot \left(B^2 \cdot N_u^2 - 2 \cdot B \cdot N_u^3 - 2 \cdot B \cdot N_u + 2 \cdot N_u^4 + 2 \cdot N_u^2 + 1\right)}$$

1, 2:

$$\frac{N_u^4 \cdot \sqrt{\left[A^4 + B^2 \cdot N_u^2 + 2 \cdot N_u^2 \cdot \left(A^2 + N_u^2\right) - 2 \cdot B \cdot N_u \cdot \left(A^2 + N_u^2\right)\right]^2}}{\sqrt{N_u^8} \cdot \left(A^4 - 2 \cdot A^2 \cdot B \cdot N_u + 2 \cdot A^2 \cdot N_u^2 + B^2 \cdot N_u^2 - 2 \cdot B \cdot N_u^3 + 2 \cdot N_u^4\right)}$$

3OBT4R5



Unit. $AB := 1$ **Given.** $N_1 := 4.67068$ $N_2 := 2.64163$ $N_3 := 1.64163$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A^{\frac{1}{4}} \cdot N_u \cdot \sqrt{B \cdot A^2 - A \cdot N_u^2 + B \cdot N_u^2}}{\sqrt{N_u^4 \cdot \sqrt{A} \cdot (A - B) + B \cdot \left(C \cdot A^2 + C \cdot N_u^2\right) \cdot \sqrt{B \cdot A^2 - A \cdot N_u^2 + B \cdot N_u^2} - A^{\frac{5}{2}} \cdot B \cdot N_u^2}} = 2.12059$$

$$Num := \frac{A^{\frac{1}{4}} \cdot N_u \cdot \sqrt{B \cdot A^2 - A \cdot N_u^2 + B \cdot N_u^2}}{\sqrt{\left(A^{\frac{1}{4}} \cdot N_u \cdot \sqrt{B \cdot A^2 - A \cdot N_u^2 + B \cdot N_u^2}\right)^2}}$$

$$Den := \frac{\sqrt{N_u^4 \cdot \sqrt{A} \cdot (A - B) + B \cdot \left(C \cdot A^2 + C \cdot N_u^2\right) \cdot \sqrt{B \cdot A^2 - A \cdot N_u^2 + B \cdot N_u^2} - A^{\frac{5}{2}} \cdot B \cdot N_u^2}}{\sqrt{\left[\sqrt{N_u^4 \cdot \sqrt{A} \cdot (A - B) + B \cdot \left(C \cdot A^2 + C \cdot N_u^2\right) \cdot \sqrt{B \cdot A^2 - A \cdot N_u^2 + B \cdot N_u^2} - A^{\frac{5}{2}} \cdot B \cdot N_u^2}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^{\frac{1}{4}} \cdot N_u \cdot \sqrt{B \cdot A^2 - A \cdot N_u^2 + B \cdot N_u^2}}{\sqrt{\sqrt{A} \cdot N_u^2 \cdot \left(B \cdot A^2 - A \cdot N_u^2 + B \cdot N_u^2\right)}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u}{\sqrt{N_u^{\,2}}}$$

1, 0, 0: $$\frac{A^{\frac{1}{4}} \cdot N_u \cdot \sqrt{A^2 - A \cdot N_u^{\,2} + N_u^{\,2}}}{\sqrt{\sqrt{A} \cdot N_u^{\,2} \cdot \left(A^2 - A \cdot N_u^{\,2} + N_u^{\,2}\right)}}$$

0, 2, 0: $$\frac{N_u \cdot \sqrt{B - N_u^{\,2} + B \cdot N_u^{\,2}}}{\sqrt{N_u^{\,2} \cdot \left(B - N_u^{\,2} + B \cdot N_u^{\,2}\right)}}$$

1, 2, 0: $$\frac{A^{\frac{1}{4}} \cdot N_u \cdot \sqrt{B \cdot A^2 - A \cdot N_u^{\,2} + B \cdot N_u^{\,2}}}{\sqrt{\sqrt{A} \cdot N_u^{\,2} \cdot \left(B \cdot A^2 - A \cdot N_u^{\,2} + B \cdot N_u^{\,2}\right)}}$$

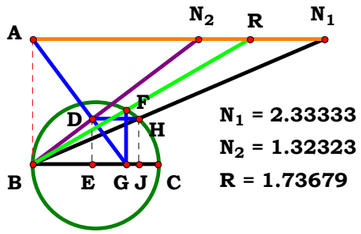
0, 0, 3: $$\frac{N_u}{\sqrt{N_u^{\,2}}}$$

1, 0, 3: $$\frac{A^{\frac{1}{4}} \cdot N_u \cdot \sqrt{A^2 - A \cdot N_u^{\,2} + N_u^{\,2}}}{\sqrt{\sqrt{A} \cdot N_u^{\,2} \cdot \left(A^2 - A \cdot N_u^{\,2} + N_u^{\,2}\right)}}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{B - N_u^{\,2} + B \cdot N_u^{\,2}}}{\sqrt{N_u^{\,2} \cdot \left(B - N_u^{\,2} + B \cdot N_u^{\,2}\right)}}$$

1, 2, 3: $$\frac{A^{\frac{1}{4}} \cdot N_u \cdot \sqrt{B \cdot A^2 - A \cdot N_u^{\,2} + B \cdot N_u^{\,2}}}{\sqrt{\sqrt{A} \cdot N_u^{\,2} \cdot \left(B \cdot A^2 - A \cdot N_u^{\,2} + B \cdot N_u^{\,2}\right)}}$$

3OBT4R6



Unit. $AB := 1$ Given. $N_1 := 2.33333$ $N_2 := 1.32323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{\sqrt{A}\cdot N_u}{\sqrt{B\cdot A^2 - A\cdot N_u{}^2 - B\cdot A\cdot N_u + B\cdot N_u{}^2}} = 1.736792$$

$$Num := \frac{\sqrt{A}\cdot N_u}{\sqrt{\left(\sqrt{A}\cdot N_u\right)^2}}$$

$$Den := \frac{\sqrt{B\cdot A^2 - A\cdot N_u{}^2 - B\cdot A\cdot N_u + B\cdot N_u{}^2}}{\sqrt{\left(\sqrt{B\cdot A^2 - A\cdot N_u{}^2 - B\cdot A\cdot N_u + B\cdot N_u{}^2}\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A}\cdot N_u}{\sqrt{A\cdot N_u{}^2}} = 0$$

For 2 variables there are 4 subsets.

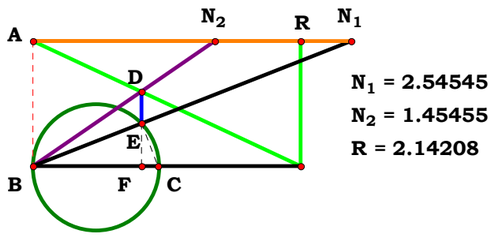
0, 0: $$\frac{N_u}{\sqrt{N_u^2}}$$

1, 0: $$\frac{\sqrt{A} \cdot N_u}{\sqrt{A \cdot N_u^2}}$$

0, 2: $$\frac{N_u}{\sqrt{N_u^2}}$$

1, 2: $$\frac{\sqrt{A} \cdot N_u}{\sqrt{A \cdot N_u^2}}$$

3OBT4R7



$N_1 = 2.54545$

$N_2 = 1.45455$

$R = 2.14208$

Unit. $AB := 1$ Given. $N_1 := 2.54545$ $N_2 := 1.45455$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u^2}{A^2 + N_u^2 - B \cdot N_u} = 2.142064$$

$$Num := \frac{N_u^2}{\sqrt{\left(N_u^2\right)^2}}$$

$$Den := \frac{A^2 + N_u^2 - B \cdot N_u}{\sqrt{\left(A^2 + N_u^2 - B \cdot N_u\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \sqrt{\left(A^2 + N_u^2 - B \cdot N_u\right)^2}}{\sqrt{N_u^4} \cdot \left(A^2 + N_u^2 - B \cdot N_u\right)} = 0$$

For 2 variables there are 4 subsets.

0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-N_u+1\right)}$$

1, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}-N_u\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}-N_u\right)}$$

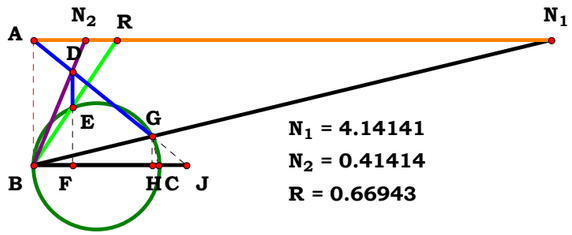
0, 2:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-B\cdot N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-B\cdot N_u+1\right)}$$

1, 2:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}-B\cdot N_u\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}-B\cdot N_u\right)}$$

3OBT4R8



$N_1 = 4.14141$

$N_2 = 0.41414$

$R = 0.66943$

Unit. $AB := 1$ **Given.** $N_1 := 4.14141$ $N_2 := .41414$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u}{\sqrt{A^2 - N_u \cdot A + B \cdot N_u}} = 0.669427$$

$$Num := \frac{N_u}{\sqrt{(N_u)^2}}$$

$$Den := \frac{\sqrt{A^2 - N_u \cdot A + B \cdot N_u}}{\sqrt{\left(\sqrt{A^2 - N_u \cdot A + B \cdot N_u}\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

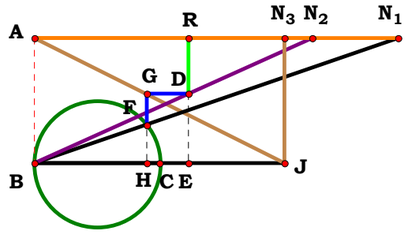
$$L - \frac{N_u}{\sqrt{N_u^2}} = 0$$

3OBT5R0

Unit.

AB := 1

Given.



$N_1 = 2.90909$

$N_2 = 2.22222$

$N_3 = 2.00000$

$R = 1.22853$

Unit. $AB := 1$ Given. $N_1 := 2.90909$ $N_2 := 2.22222$ $N_3 := 2$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u{}^2 - C \cdot N_u\right)}{B \cdot \left(A^2 + N_u{}^2\right)} = 1.228529$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u{}^2 - C \cdot N_u\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u{}^2 - C \cdot N_u\right)\right]^2}}$$

$$Den := \frac{B \cdot \left(A^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot \left(A^2 + N_u{}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2 + N_u{}^2\right)^2} \cdot \left(A^2 + N_u{}^2 - C \cdot N_u\right)}{B \cdot \sqrt{N_u{}^2 \cdot \left(A^2 + N_u{}^2 - C \cdot N_u\right)^2} \cdot \left(A^2 + N_u{}^2\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}-N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}$$

0, 0, 3:

$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-C \cdot N_u+1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}-C \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}$$

1, 0, 0:

$$\frac{N_u \cdot \sqrt{\left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2+N_u^{\,2}-N_u\right)}{\left(A^2+N_u^{\,2}\right) \cdot \sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}-N_u\right)^2}}$$

1, 0, 3:

$$\frac{N_u \cdot \sqrt{\left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2+N_u^{\,2}-C \cdot N_u\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}-C \cdot N_u\right)^2} \cdot \left(A^2+N_u^{\,2}\right)}$$

0, 2, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}-N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}$$

0, 2, 3:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-C \cdot N_u+1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}-C \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}$$

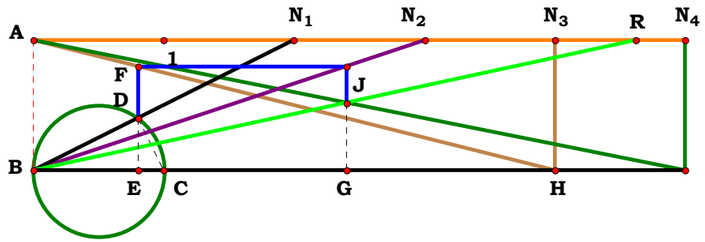
1, 2, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2+N_u^{\,2}-N_u\right)}{B \cdot \left(A^2+N_u^{\,2}\right) \cdot \sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}-N_u\right)^2}}$$

1, 2, 3:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2+N_u^{\,2}-C \cdot N_u\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}-C \cdot N_u\right)^2} \cdot \left(A^2+N_u^{\,2}\right)}$$

3OBT5R1



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$R = 4.61538$

Unit. $AB := 1$ **Given.** $N_1 := 2$ $N_2 := 3$ $N_3 := 4$ $N_4 := 5$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right)}{A^2 \cdot B - A^2 \cdot D + B \cdot {N_u}^2 - D \cdot {N_u}^2 + C \cdot D \cdot N_u} = 4.615385$$

$$Num := \frac{N_u \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right)}{\sqrt{\left[N_u \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right)\right]^2}}$$

$$Den := \frac{A^2 \cdot B - A^2 \cdot D + B \cdot {N_u}^2 - D \cdot {N_u}^2 + C \cdot D \cdot N_u}{\sqrt{\left(A^2 \cdot B - A^2 \cdot D + B \cdot {N_u}^2 - D \cdot {N_u}^2 + C \cdot D \cdot N_u\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left(A^2 \cdot B - A^2 \cdot D + B \cdot {N_u}^2 - D \cdot {N_u}^2 + C \cdot D \cdot N_u\right)^2} \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right)}{\sqrt{{N_u}^2 \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right)^2} \cdot \left(A^2 \cdot B - A^2 \cdot D + B \cdot {N_u}^2 - D \cdot {N_u}^2 + C \cdot D \cdot N_u\right)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:

$$\frac{\sqrt{N_u^{\,2}}\cdot\left(N_u^{\,2}-N_u+1\right)}{\sqrt{N_u^{\,2}\cdot\left(N_u^{\,2}-N_u+1\right)^2}}$$

1, 0, 0, 0:

$$\frac{\sqrt{N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}-N_u\right)}{\sqrt{N_u^{\,2}\cdot\left(A^2+N_u^{\,2}-N_u\right)^2}}$$

0, 2, 0, 0:

$$\frac{N_u\cdot\sqrt{\left(B+N_u-N_u^{\,2}+B\cdot N_u^{\,2}-1\right)^2}\cdot\left(N_u^{\,2}-N_u+1\right)}{\sqrt{N_u^{\,2}\cdot\left(N_u^{\,2}-N_u+1\right)^2}\cdot\left(B+N_u-N_u^{\,2}+B\cdot N_u^{\,2}-1\right)}$$

1, 2, 0, 0:

$$\frac{N_u\cdot\sqrt{\left(N_u-A^2-N_u^{\,2}+A^2\cdot B+B\cdot N_u^{\,2}\right)^2}\cdot\left(A^2+N_u^{\,2}-N_u\right)}{\sqrt{N_u^{\,2}\cdot\left(A^2+N_u^{\,2}-N_u\right)^2}\cdot\left(N_u-A^2-N_u^{\,2}+A^2\cdot B+B\cdot N_u^{\,2}\right)}$$

0, 0, 3, 0:

$$\frac{\sqrt{C^2\cdot N_u^{\,2}}\cdot\left(N_u^{\,2}-C\cdot N_u+1\right)}{C\cdot\sqrt{N_u^{\,2}\cdot\left(N_u^{\,2}-C\cdot N_u+1\right)^2}}$$

1, 0, 3, 0:

$$\frac{\sqrt{C^2\cdot N_u^{\,2}}\cdot\left(A^2+N_u^{\,2}-C\cdot N_u\right)}{C\cdot\sqrt{N_u^{\,2}\cdot\left(A^2+N_u^{\,2}-C\cdot N_u\right)^2}}$$

0, 2, 3, 0:

$$\frac{N_u\cdot\sqrt{\left(B-N_u^{\,2}+C\cdot N_u+B\cdot N_u^{\,2}-1\right)^2}\cdot\left(N_u^{\,2}-C\cdot N_u+1\right)}{\sqrt{N_u^{\,2}\cdot\left(N_u^{\,2}-C\cdot N_u+1\right)^2}\cdot\left(B-N_u^{\,2}+C\cdot N_u+B\cdot N_u^{\,2}-1\right)}$$

1, 2, 3, 0:

$$\frac{N_u\cdot\sqrt{\left(C\cdot N_u-N_u^{\,2}-A^2+A^2\cdot B+B\cdot N_u^{\,2}\right)^2}\cdot\left(A^2+N_u^{\,2}-C\cdot N_u\right)}{\sqrt{N_u^{\,2}\cdot\left(A^2+N_u^{\,2}-C\cdot N_u\right)^2}\cdot\left(C\cdot N_u-N_u^{\,2}-A^2+A^2\cdot B+B\cdot N_u^{\,2}\right)}$$

0, 0, 0, 4:

$$\frac{N_u \cdot \sqrt{\left(N_u^2 - D + D \cdot N_u - D \cdot N_u^2 + 1\right)^2} \cdot \left(N_u^2 - N_u + 1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2 - N_u + 1\right)^2} \cdot \left(N_u^2 - D + D \cdot N_u - D \cdot N_u^2 + 1\right)}$$

1, 0, 0, 4:

$$\frac{N_u \cdot \sqrt{\left(A^2 + N_u^2 + D \cdot N_u - A^2 \cdot D - D \cdot N_u^2\right)^2} \cdot \left(A^2 + N_u^2 - N_u\right)}{\sqrt{N_u^2 \cdot \left(A^2 + N_u^2 - N_u\right)^2} \cdot \left(A^2 + N_u^2 + D \cdot N_u - A^2 \cdot D - D \cdot N_u^2\right)}$$

0, 2, 0, 4:

$$\frac{N_u \cdot \sqrt{\left(B - D + D \cdot N_u + B \cdot N_u^2 - D \cdot N_u^2\right)^2} \cdot \left(N_u^2 - N_u + 1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2 - N_u + 1\right)^2} \cdot \left(B - D + D \cdot N_u + B \cdot N_u^2 - D \cdot N_u^2\right)}$$

1, 2, 0, 4:

$$\frac{N_u \cdot \sqrt{\left(D \cdot N_u + A^2 \cdot B - A^2 \cdot D + B \cdot N_u^2 - D \cdot N_u^2\right)^2} \cdot \left(A^2 + N_u^2 - N_u\right)}{\sqrt{N_u^2 \cdot \left(A^2 + N_u^2 - N_u\right)^2} \cdot \left(D \cdot N_u + A^2 \cdot B - A^2 \cdot D + B \cdot N_u^2 - D \cdot N_u^2\right)}$$

0, 0, 3, 4:

$$\frac{N_u \cdot \sqrt{\left(N_u^2 - D - D \cdot N_u^2 + C \cdot D \cdot N_u + 1\right)^2} \cdot \left(N_u^2 - C \cdot N_u + 1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2 - C \cdot N_u + 1\right)^2} \cdot \left(N_u^2 - D - D \cdot N_u^2 + C \cdot D \cdot N_u + 1\right)}$$

1, 0, 3, 4:

$$\frac{N_u \cdot \sqrt{\left(A^2 + N_u^2 - A^2 \cdot D - D \cdot N_u^2 + C \cdot D \cdot N_u\right)^2} \cdot \left(A^2 + N_u^2 - C \cdot N_u\right)}{\sqrt{N_u^2 \cdot \left(A^2 + N_u^2 - C \cdot N_u\right)^2} \cdot \left(A^2 + N_u^2 - A^2 \cdot D - D \cdot N_u^2 + C \cdot D \cdot N_u\right)}$$

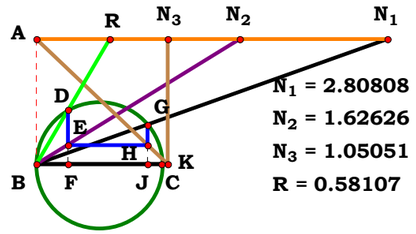
0, 2, 3, 4:

$$\frac{N_u \cdot \sqrt{\left(B - D + B \cdot N_u^2 - D \cdot N_u^2 + C \cdot D \cdot N_u\right)^2} \cdot \left(N_u^2 - C \cdot N_u + 1\right)}{\sqrt{N_u^2 \cdot \left(N_u^2 - C \cdot N_u + 1\right)^2} \cdot \left(B - D + B \cdot N_u^2 - D \cdot N_u^2 + C \cdot D \cdot N_u\right)}$$

1, 2, 3, 4:

$$\frac{N_u \cdot \sqrt{\left(A^2 \cdot B - A^2 \cdot D + B \cdot N_u^2 - D \cdot N_u^2 + C \cdot D \cdot N_u\right)^2} \cdot \left(A^2 + N_u^2 - C \cdot N_u\right)}{\sqrt{N_u^2 \cdot \left(A^2 + N_u^2 - C \cdot N_u\right)^2} \cdot \left(A^2 \cdot B - A^2 \cdot D + B \cdot N_u^2 - D \cdot N_u^2 + C \cdot D \cdot N_u\right)}$$

3OBT5R2



Unit. $AB := 1$ Given. $N_1 := 2.80808$ $N_2 := 1.62626$ $N_3 := 1.05051$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right)}{\sqrt{N_u \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right) \cdot \left(A^2 \cdot B - {N_u}^3 - A^2 \cdot N_u + B \cdot {N_u}^2 + C \cdot {N_u}^2\right)}} = 0.581077$$

$$Num := \frac{N_u \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right)}{\sqrt{\left[N_u \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right)\right]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right) \cdot \left(A^2 \cdot B - {N_u}^3 - A^2 \cdot N_u + B \cdot {N_u}^2 + C \cdot {N_u}^2\right)}}{\sqrt{\left[\sqrt{N_u \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right) \cdot \left(A^2 \cdot B - {N_u}^3 - A^2 \cdot N_u + B \cdot {N_u}^2 + C \cdot {N_u}^2\right)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right)}{\sqrt{{N_u}^2 \cdot \left(A^2 + {N_u}^2 - C \cdot N_u\right)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u \cdot \left(N_u^{\,2} - N_u + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - N_u + 1\right)^2}}$$

1, 0, 0:

$$\frac{N_u \cdot \left(A^2 + N_u^{\,2} - N_u\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2} - N_u\right)^2}}$$

0, 2, 0:

$$\frac{N_u \cdot \left(N_u^{\,2} - N_u + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - N_u + 1\right)^2}}$$

1, 2, 0:

$$\frac{N_u \cdot \left(A^2 + N_u^{\,2} - N_u\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2} - N_u\right)^2}}$$

0, 0, 3:

$$\frac{N_u \cdot \left(N_u^{\,2} - C \cdot N_u + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - C \cdot N_u + 1\right)^2}}$$

1, 0, 3:

$$\frac{N_u \cdot \left(A^2 + N_u^{\,2} - C \cdot N_u\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2} - C \cdot N_u\right)^2}}$$

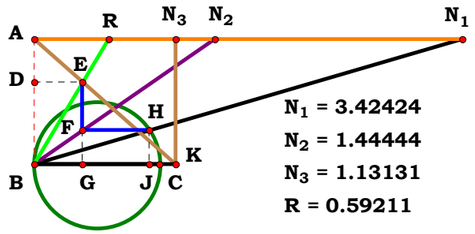
0, 2, 3:

$$\frac{N_u \cdot \left(N_u^{\,2} - C \cdot N_u + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - C \cdot N_u + 1\right)^2}}$$

1, 2, 3:

$$\frac{N_u \cdot \left(A^2 + N_u^{\,2} - C \cdot N_u\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2} - C \cdot N_u\right)^2}}$$

3OBT5R3



Unit. $AB := 1$ Given. $N_1 := 3.42424$ $N_2 := 1.44444$ $N_3 := 1.13131$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A \cdot N_u^2}{B \cdot A^2 - C \cdot A \cdot N_u + B \cdot N_u^2} = 0.592107$$

$$Num := \frac{A \cdot N_u^2}{\sqrt{\left(A \cdot N_u^2\right)^2}}$$

$$Den := \frac{B \cdot A^2 - C \cdot A \cdot N_u + B \cdot N_u^2}{\sqrt{\left(B \cdot A^2 - C \cdot A \cdot N_u + B \cdot N_u^2\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u^2 \cdot \sqrt{\left(B \cdot A^2 - C \cdot A \cdot N_u + B \cdot N_u^2\right)^2}}{\sqrt{A^2 \cdot N_u^4} \cdot \left(B \cdot A^2 - C \cdot A \cdot N_u + B \cdot N_u^2\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-N_u+1\right)}$$

0, 0, 3: $$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-C\cdot N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-C\cdot N_u+1\right)}$$

1, 0, 0: $$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left(A^2-A\cdot N_u+N_u^{\,2}\right)^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)}$$

1, 0, 3: $$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left(A^2-C\cdot A\cdot N_u+N_u^{\,2}\right)^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(A^2-C\cdot A\cdot N_u+N_u^{\,2}\right)}$$

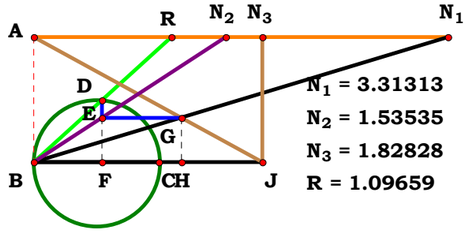
0, 2, 0: $$\frac{N_u^{\,2}\cdot\sqrt{\left(B\cdot N_u^{\,2}-N_u+B\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(B\cdot N_u^{\,2}-N_u+B\right)}$$

0, 2, 3: $$\frac{N_u^{\,2}\cdot\sqrt{\left(B\cdot N_u^{\,2}-C\cdot N_u+B\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(B\cdot N_u^{\,2}-C\cdot N_u+B\right)}$$

1, 2, 0: $$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left(B\cdot A^2-A\cdot N_u+B\cdot N_u^{\,2}\right)^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(B\cdot A^2-A\cdot N_u+B\cdot N_u^{\,2}\right)}$$

1, 2, 3: $$\frac{A\cdot N_u^{\,2}\cdot\sqrt{\left(B\cdot A^2-C\cdot A\cdot N_u+B\cdot N_u^{\,2}\right)^2}}{\sqrt{A^2\cdot N_u^{\,4}}\cdot\left(B\cdot A^2-C\cdot A\cdot N_u+B\cdot N_u^{\,2}\right)}$$

3OBT5R4



Unit. $AB := 1$ **Given.** $N_1 := 3.31313$ $N_2 := 1.53535$ $N_3 := 1.82828$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A}\cdot N_u}{\sqrt{N_u\cdot\left(A\cdot B+B\cdot C-A\cdot N_u\right)}} = 1.096582$$

$$Num := \frac{\sqrt{A}\cdot N_u}{\sqrt{\left(\sqrt{A}\cdot N_u\right)^2}}$$

$$Den := \frac{\sqrt{N_u\cdot\left(A\cdot B+B\cdot C-A\cdot N_u\right)}}{\sqrt{\left[\sqrt{N_u\cdot\left(A\cdot B+B\cdot C-A\cdot N_u\right)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A}\cdot N_u}{\sqrt{A\cdot {N_u}^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

0, 0, 3: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0: $\frac{\sqrt{A} \cdot N_u}{\sqrt{A \cdot N_u^2}}$

1, 0, 3: $\frac{\sqrt{A} \cdot N_u}{\sqrt{A \cdot N_u^2}}$

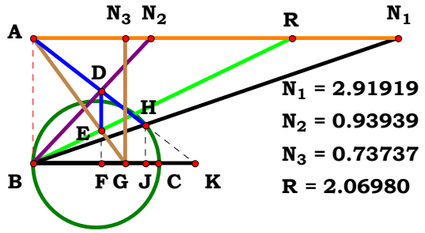
0, 2, 0: $\frac{N_u}{\sqrt{N_u^2}}$

0, 2, 3: $\frac{N_u}{\sqrt{N_u^2}}$

1, 2, 0: $\frac{\sqrt{A} \cdot N_u}{\sqrt{A \cdot N_u^2}}$

1, 2, 3: $\frac{\sqrt{A} \cdot N_u}{\sqrt{A \cdot N_u^2}}$

3OBT5R5



Unit. $AB := 1$ **Given.** $N_1 := 2.91919$ $N_2 := .93939$ $N_3 := .73737$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u^2}{A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u} = 2.069809$$

$$Num := \frac{N_u^2}{\sqrt{\left(N_u^2\right)^2}}$$

$$Den := \frac{A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u}{\sqrt{\left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \sqrt{\left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)^2}}{\sqrt{N_u^4} \cdot \left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-N_u+1\right)}$$

1, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(A^2-A\cdot N_u+N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)}$$

0, 2, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-2\cdot N_u+B\cdot N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-2\cdot N_u+B\cdot N_u+1\right)}$$

1, 2, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(A^2-N_u+N_u^{\,2}-A\cdot N_u+B\cdot N_u\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(A^2-N_u+N_u^{\,2}-A\cdot N_u+B\cdot N_u\right)}$$

0, 0, 3:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-C\cdot N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-C\cdot N_u+1\right)}$$

1, 0, 3:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u+A^2+N_u^{\,2}-A\cdot N_u-C\cdot N_u\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u+A^2+N_u^{\,2}-A\cdot N_u-C\cdot N_u\right)}$$

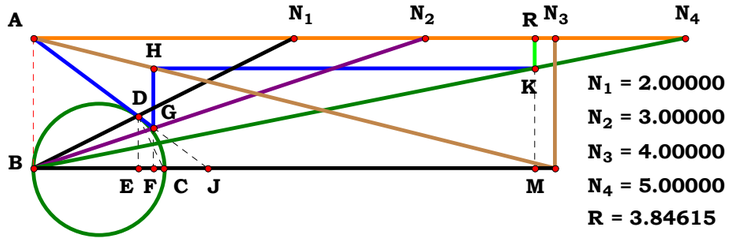
0, 2, 3:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-N_u+B\cdot N_u-C\cdot N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-N_u+B\cdot N_u-C\cdot N_u+1\right)}$$

1, 2, 3:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}-A\cdot N_u+B\cdot N_u-C\cdot N_u\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}-A\cdot N_u+B\cdot N_u-C\cdot N_u\right)}$$

3OBT5R6



Unit. $AB := 1$ Given. $N_1 := 2$ $N_2 := 3$ $N_3 := 4$ $N_4 := 5$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + {N_u}^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)}{D \cdot \left(A^2 - A \cdot N_u + {N_u}^2 + B \cdot N_u\right)} = 3.846154$$

$$Num := \frac{N_u \cdot \left(A^2 + {N_u}^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)}{\sqrt{\left[N_u \cdot \left(A^2 + {N_u}^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)\right]^2}}$$

$$Den := \frac{D \cdot \left(A^2 - A \cdot N_u + {N_u}^2 + B \cdot N_u\right)}{\sqrt{\left[D \cdot \left(A^2 - A \cdot N_u + {N_u}^2 + B \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{D^2 \cdot \left(A^2 - A \cdot N_u + {N_u}^2 + B \cdot N_u\right)^2} \cdot \left(A^2 + {N_u}^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)}{D \cdot \sqrt{{N_u}^2 \cdot \left(A^2 + {N_u}^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)^2} \cdot \left(A^2 - A \cdot N_u + {N_u}^2 + B \cdot N_u\right)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:
$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}-N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}$$

1, 0, 0, 0:
$$\frac{N_u \cdot \sqrt{\left(A^2-A \cdot N_u+N_u^{\,2}+N_u\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}+N_u\right)}$$

0, 2, 0, 0:
$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2}-N_u+B \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}-2 \cdot N_u+B \cdot N_u+1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}-2 \cdot N_u+B \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}-N_u+B \cdot N_u+1\right)}$$

1, 2, 0, 0:
$$\frac{N_u \cdot \sqrt{\left(A^2-A \cdot N_u+N_u^{\,2}+B \cdot N_u\right)^2} \cdot \left(A^2-N_u+N_u^{\,2}-A \cdot N_u+B \cdot N_u\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2-N_u+N_u^{\,2}-A \cdot N_u+B \cdot N_u\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}+B \cdot N_u\right)}$$

0, 0, 3, 0:
$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-C \cdot N_u+1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}-C \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}$$

1, 0, 3, 0:
$$\frac{N_u \cdot \sqrt{\left(A^2-A \cdot N_u+N_u^{\,2}+N_u\right)^2} \cdot \left(N_u+A^2+N_u^{\,2}-A \cdot N_u-C \cdot N_u\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u+A^2+N_u^{\,2}-A \cdot N_u-C \cdot N_u\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}+N_u\right)}$$

0, 2, 3, 0:
$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2}-N_u+B \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}-N_u+B \cdot N_u-C \cdot N_u+1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}-N_u+B \cdot N_u-C \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}-N_u+B \cdot N_u+1\right)}$$

1, 2, 3, 0:
$$\frac{N_u \cdot \sqrt{\left(A^2-A \cdot N_u+N_u^{\,2}+B \cdot N_u\right)^2} \cdot \left(A^2+N_u^{\,2}-A \cdot N_u+B \cdot N_u-C \cdot N_u\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}-A \cdot N_u+B \cdot N_u-C \cdot N_u\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}+B \cdot N_u\right)}$$

0, 0, 0, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot \left(N_u{}^2 + 1\right)^2} \cdot \left(N_u{}^2 - N_u + 1\right)}{D \cdot \sqrt{N_u{}^2 \cdot \left(N_u{}^2 - N_u + 1\right)^2} \cdot \left(N_u{}^2 + 1\right)}$$

1, 0, 0, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot \left(A^2 - A \cdot N_u + N_u{}^2 + N_u\right)^2} \cdot \left(A^2 - A \cdot N_u + N_u{}^2\right)}{D \cdot \sqrt{N_u{}^2 \cdot \left(A^2 - A \cdot N_u + N_u{}^2\right)^2} \cdot \left(A^2 - A \cdot N_u + N_u{}^2 + N_u\right)}$$

0, 2, 0, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot \left(N_u{}^2 - N_u + B \cdot N_u + 1\right)^2} \cdot \left(N_u{}^2 - 2 \cdot N_u + B \cdot N_u + 1\right)}{D \cdot \sqrt{N_u{}^2 \cdot \left(N_u{}^2 - 2 \cdot N_u + B \cdot N_u + 1\right)^2} \cdot \left(N_u{}^2 - N_u + B \cdot N_u + 1\right)}$$

1, 2, 0, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot \left(A^2 - A \cdot N_u + N_u{}^2 + B \cdot N_u\right)^2} \cdot \left(A^2 - N_u + N_u{}^2 - A \cdot N_u + B \cdot N_u\right)}{D \cdot \sqrt{N_u{}^2 \cdot \left(A^2 - N_u + N_u{}^2 - A \cdot N_u + B \cdot N_u\right)^2} \cdot \left(A^2 - A \cdot N_u + N_u{}^2 + B \cdot N_u\right)}$$

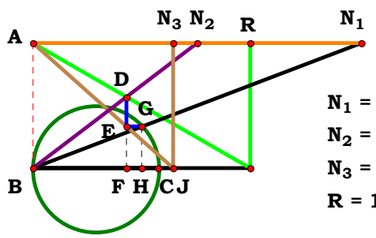
0, 0, 3, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot \left(N_u{}^2 + 1\right)^2} \cdot \left(N_u{}^2 - C \cdot N_u + 1\right)}{D \cdot \sqrt{N_u{}^2 \cdot \left(N_u{}^2 - C \cdot N_u + 1\right)^2} \cdot \left(N_u{}^2 + 1\right)}$$

1, 0, 3, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot \left(A^2 - A \cdot N_u + N_u{}^2 + N_u\right)^2} \cdot \left(N_u + A^2 + N_u{}^2 - A \cdot N_u - C \cdot N_u\right)}{D \cdot \sqrt{N_u{}^2 \cdot \left(N_u + A^2 + N_u{}^2 - A \cdot N_u - C \cdot N_u\right)^2} \cdot \left(A^2 - A \cdot N_u + N_u{}^2 + N_u\right)}$$

0, 2, 3, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot \left(N_u{}^2 - N_u + B \cdot N_u + 1\right)^2} \cdot \left(N_u{}^2 - N_u + B \cdot N_u - C \cdot N_u + 1\right)}{D \cdot \sqrt{N_u{}^2 \cdot \left(N_u{}^2 - N_u + B \cdot N_u - C \cdot N_u + 1\right)^2} \cdot \left(N_u{}^2 - N_u + B \cdot N_u + 1\right)}$$

1, 2, 3, 4: $$\frac{N_u \cdot \sqrt{D^2 \cdot \left(A^2 - A \cdot N_u + N_u{}^2 + B \cdot N_u\right)^2} \cdot \left(A^2 + N_u{}^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)}{D \cdot \sqrt{N_u{}^2 \cdot \left(A^2 + N_u{}^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)^2} \cdot \left(A^2 - A \cdot N_u + N_u{}^2 + B \cdot N_u\right)}$$

3OBT5R7



$N_1 = 2.62626$
$N_2 = 1.31313$
$N_3 = 1.12121$
$R = 1.73993$

Unit. $AB := 1$ **Given.** $N_1 := 2.62626$ $N_2 := 1.31313$ $N_3 := 1.12121$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right)}{A^2 \cdot C - A^2 \cdot B - B \cdot N_u^2 + C \cdot N_u^2 + A \cdot B \cdot N_u} = 1.73992$$

$$Num := \frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right)}{\sqrt{\left[N_u \cdot \left(A^2 - A \cdot N_u + N_u^2\right)\right]^2}}$$

$$Den := \frac{A^2 \cdot C - A^2 \cdot B - B \cdot N_u^2 + C \cdot N_u^2 + A \cdot B \cdot N_u}{\sqrt{\left(A^2 \cdot C - A^2 \cdot B - B \cdot N_u^2 + C \cdot N_u^2 + A \cdot B \cdot N_u\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left(A^2 \cdot C - A^2 \cdot B - B \cdot N_u^2 + C \cdot N_u^2 + A \cdot B \cdot N_u\right)^2} \cdot \left(A^2 - A \cdot N_u + N_u^2\right)}{\sqrt{N_u^2 \cdot \left(A^2 - A \cdot N_u + N_u^2\right)^2} \cdot \left(A^2 \cdot C - A^2 \cdot B - B \cdot N_u^2 + C \cdot N_u^2 + A \cdot B \cdot N_u\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{\sqrt{N_u^{\,2}}\cdot\left(N_u^{\,2}-N_u+1\right)}{\sqrt{N_u^{\,2}\cdot\left(N_u^{\,2}-N_u+1\right)^2}}$$

1, 0, 0:

$$\frac{\sqrt{A^2\cdot N_u^{\,2}}\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)}{A\cdot\sqrt{N_u^{\,2}\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)^2}}$$

0, 2, 0:

$$\frac{N_u\cdot\sqrt{\left(N_u^{\,2}-B+B\cdot N_u-B\cdot N_u^{\,2}+1\right)^2}\cdot\left(N_u^{\,2}-N_u+1\right)}{\sqrt{N_u^{\,2}\cdot\left(N_u^{\,2}-N_u+1\right)^2}\cdot\left(N_u^{\,2}-B+B\cdot N_u-B\cdot N_u^{\,2}+1\right)}$$

1, 2, 0:

$$\frac{N_u\cdot\sqrt{\left(A^2+N_u^{\,2}-A^2\cdot B-B\cdot N_u^{\,2}+A\cdot B\cdot N_u\right)^2}\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)}{\sqrt{N_u^{\,2}\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)^2}\cdot\left(A^2+N_u^{\,2}-A^2\cdot B-B\cdot N_u^{\,2}+A\cdot B\cdot N_u\right)}$$

0, 0, 3:

$$\frac{N_u\cdot\sqrt{\left(C+N_u-N_u^{\,2}+C\cdot N_u^{\,2}-1\right)^2}\cdot\left(N_u^{\,2}-N_u+1\right)}{\sqrt{N_u^{\,2}\cdot\left(N_u^{\,2}-N_u+1\right)^2}\cdot\left(C+N_u-N_u^{\,2}+C\cdot N_u^{\,2}-1\right)}$$

1, 0, 3:

$$\frac{N_u\cdot\sqrt{\left(A\cdot N_u-N_u^{\,2}-A^2+A^2\cdot C+C\cdot N_u^{\,2}\right)^2}\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)}{\sqrt{N_u^{\,2}\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)^2}\cdot\left(A\cdot N_u-N_u^{\,2}-A^2+A^2\cdot C+C\cdot N_u^{\,2}\right)}$$

0, 2, 3:

$$\frac{N_u\cdot\sqrt{\left(C-B+B\cdot N_u-B\cdot N_u^{\,2}+C\cdot N_u^{\,2}\right)^2}\cdot\left(N_u^{\,2}-N_u+1\right)}{\sqrt{N_u^{\,2}\cdot\left(N_u^{\,2}-N_u+1\right)^2}\cdot\left(C-B+B\cdot N_u-B\cdot N_u^{\,2}+C\cdot N_u^{\,2}\right)}$$

1, 2, 3:

$$\frac{N_u\cdot\sqrt{\left(A^2\cdot C-A^2\cdot B-B\cdot N_u^{\,2}+C\cdot N_u^{\,2}+A\cdot B\cdot N_u\right)^2}\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)}{\sqrt{N_u^{\,2}\cdot\left(A^2-A\cdot N_u+N_u^{\,2}\right)^2}\cdot\left(A^2\cdot C-A^2\cdot B-B\cdot N_u^{\,2}+C\cdot N_u^{\,2}+A\cdot B\cdot N_u\right)}$$

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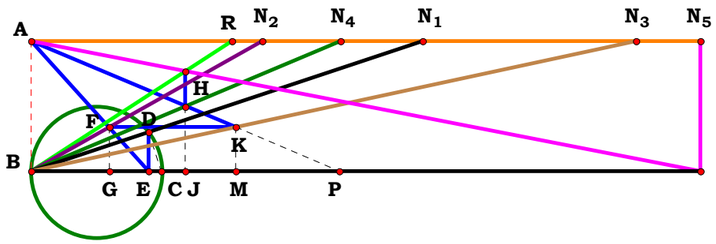

$N_1 = 3.00000$
$N_2 = 1.76991$
$N_3 = 4.64163$
$N_4 = 2.37279$
$N_5 = 5.12938$
$R = 1.53806$

Unit. $AB := 1$ **Given.** $N_1 := 3$ $N_2 := 1.76991$ $N_3 := 4.64163$

$N_4 := 2.37279$ $N_5 := 5.12938$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot N_u^2}{A^2 \cdot C + C \cdot N_u^2 + B \cdot D \cdot N_u - B \cdot E \cdot N_u} = 1.53806$$

$$Num := \frac{B \cdot N_u^2}{\sqrt{\left(B \cdot N_u^2\right)^2}}$$

$$Den := \frac{A^2 \cdot C + C \cdot N_u^2 + B \cdot D \cdot N_u - B \cdot E \cdot N_u}{\sqrt{\left(A^2 \cdot C + C \cdot N_u^2 + B \cdot D \cdot N_u - B \cdot E \cdot N_u\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u^2 \cdot \sqrt{\left(A^2 \cdot C + C \cdot N_u^2 + B \cdot D \cdot N_u - B \cdot E \cdot N_u\right)^2}}{\sqrt{B^2 \cdot N_u^4} \cdot \left(A^2 \cdot C + C \cdot N_u^2 + B \cdot D \cdot N_u - B \cdot E \cdot N_u\right)} = 0$$

For 5 variables there are 32 subsets.

0, 0, 0, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}+1\right)}$$

1, 0, 0, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}\right)}$$

0, 2, 0, 0, 0:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(N_u^{\,2}+1\right)}$$

1, 2, 0, 0, 0:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}\right)}$$

0, 0, 3, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(C\cdot N_u^{\,2}+C\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(C\cdot N_u^{\,2}+C\right)}$$

1, 0, 3, 0, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(C\cdot A^2+C\cdot N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(C\cdot A^2+C\cdot N_u^{\,2}\right)}$$

0, 2, 3, 0, 0:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(C\cdot N_u^{\,2}+C\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(C\cdot N_u^{\,2}+C\right)}$$

1, 2, 3, 0, 0:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(C\cdot A^2+C\cdot N_u^{\,2}\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(C\cdot A^2+C\cdot N_u^{\,2}\right)}$$

0, 0, 0, 4, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-N_u+D\cdot N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}-N_u+D\cdot N_u+1\right)}$$

1, 0, 0, 4, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(A^2-N_u+N_u^{\,2}+D\cdot N_u\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(A^2-N_u+N_u^{\,2}+D\cdot N_u\right)}$$

0, 2, 0, 4, 0:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}-B\cdot N_u+B\cdot D\cdot N_u+1\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(N_u^{\,2}-B\cdot N_u+B\cdot D\cdot N_u+1\right)}$$

1, 2, 0, 4, 0:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}-B\cdot N_u+B\cdot D\cdot N_u\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}-B\cdot N_u+B\cdot D\cdot N_u\right)}$$

0, 0, 3, 4, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(C-N_u+D\cdot N_u+C\cdot N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(C-N_u+D\cdot N_u+C\cdot N_u^{\,2}\right)}$$

1, 0, 3, 4, 0:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(D\cdot N_u-N_u+A^2\cdot C+C\cdot N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(D\cdot N_u-N_u+A^2\cdot C+C\cdot N_u^{\,2}\right)}$$

0, 2, 3, 4, 0:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(C-B\cdot N_u+C\cdot N_u^{\,2}+B\cdot D\cdot N_u\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(C-B\cdot N_u+C\cdot N_u^{\,2}+B\cdot D\cdot N_u\right)}$$

1, 2, 3, 4, 0:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(A^2\cdot C-B\cdot N_u+C\cdot N_u^{\,2}+B\cdot D\cdot N_u\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(A^2\cdot C-B\cdot N_u+C\cdot N_u^{\,2}+B\cdot D\cdot N_u\right)}$$

0, 0, 0, 0, 5:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u+N_u^{\,2}-E\cdot N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u+N_u^{\,2}-E\cdot N_u+1\right)}$$

1, 0, 0, 0, 5:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u+A^2+N_u^{\,2}-E\cdot N_u\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u+A^2+N_u^{\,2}-E\cdot N_u\right)}$$

0, 2, 0, 0, 5:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}+B\cdot N_u-B\cdot E\cdot N_u+1\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(N_u^{\,2}+B\cdot N_u-B\cdot E\cdot N_u+1\right)}$$

1, 2, 0, 0, 5:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}+B\cdot N_u-B\cdot E\cdot N_u\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}+B\cdot N_u-B\cdot E\cdot N_u\right)}$$

0, 0, 3, 0, 5:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(C+N_u-E\cdot N_u+C\cdot N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(C+N_u-E\cdot N_u+C\cdot N_u^{\,2}\right)}$$

1, 0, 3, 0, 5:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u-E\cdot N_u+A^2\cdot C+C\cdot N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u-E\cdot N_u+A^2\cdot C+C\cdot N_u^{\,2}\right)}$$

0, 2, 3, 0, 5:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(C+B\cdot N_u+C\cdot N_u^{\,2}-B\cdot E\cdot N_u\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(C+B\cdot N_u+C\cdot N_u^{\,2}-B\cdot E\cdot N_u\right)}$$

1, 2, 3, 0, 5:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(B\cdot N_u+A^2\cdot C+C\cdot N_u^{\,2}-B\cdot E\cdot N_u\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(B\cdot N_u+A^2\cdot C+C\cdot N_u^{\,2}-B\cdot E\cdot N_u\right)}$$

0, 0, 0, 4, 5:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}+D\cdot N_u-E\cdot N_u+1\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(N_u^{\,2}+D\cdot N_u-E\cdot N_u+1\right)}$$

1, 0, 0, 4, 5:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}+D\cdot N_u-E\cdot N_u\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}+D\cdot N_u-E\cdot N_u\right)}$$

0, 2, 0, 4, 5:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(N_u^{\,2}+B\cdot D\cdot N_u-B\cdot E\cdot N_u+1\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(N_u^{\,2}+B\cdot D\cdot N_u-B\cdot E\cdot N_u+1\right)}$$

1, 2, 0, 4, 5:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(A^2+N_u^{\,2}+B\cdot D\cdot N_u-B\cdot E\cdot N_u\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(A^2+N_u^{\,2}+B\cdot D\cdot N_u-B\cdot E\cdot N_u\right)}$$

0, 0, 3, 4, 5:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(C+D\cdot N_u-E\cdot N_u+C\cdot N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(C+D\cdot N_u-E\cdot N_u+C\cdot N_u^{\,2}\right)}$$

1, 0, 3, 4, 5:

$$\frac{N_u^{\,2}\cdot\sqrt{\left(D\cdot N_u-E\cdot N_u+A^2\cdot C+C\cdot N_u^{\,2}\right)^2}}{\sqrt{N_u^{\,4}}\cdot\left(D\cdot N_u-E\cdot N_u+A^2\cdot C+C\cdot N_u^{\,2}\right)}$$

0, 2, 3, 4, 5:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(C+C\cdot N_u^{\,2}+B\cdot D\cdot N_u-B\cdot E\cdot N_u\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(C+C\cdot N_u^{\,2}+B\cdot D\cdot N_u-B\cdot E\cdot N_u\right)}$$

1, 2, 3, 4, 5:

$$\frac{B\cdot N_u^{\,2}\cdot\sqrt{\left(A^2\cdot C+C\cdot N_u^{\,2}+B\cdot D\cdot N_u-B\cdot E\cdot N_u\right)^2}}{\sqrt{B^2\cdot N_u^{\,4}}\cdot\left(A^2\cdot C+C\cdot N_u^{\,2}+B\cdot D\cdot N_u-B\cdot E\cdot N_u\right)}$$

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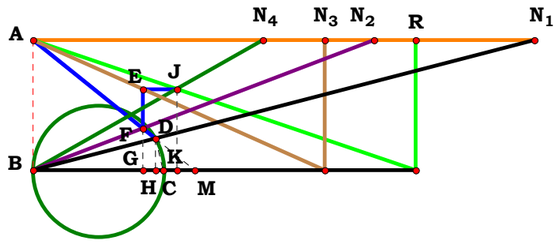

$N_1 = 3.84266$
$N_2 = 2.61257$
$N_3 = 2.23955$
$N_4 = 1.76258$
$R = 2.93581$

Unit. $AB := 1$ **Given.** $N_1 := 3.84266$ $N_2 := 2.61257$ $N_3 := 2.23955$

$N_4 := 1.76258$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A^2 + {N_u}^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u}{C \cdot D} = 2.935802$$

$$Num := \frac{A^2 + {N_u}^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u}{\sqrt{\left(A^2 + {N_u}^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)^2}}$$

$$Den := \frac{C \cdot D}{\sqrt{(C \cdot D)^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{C^2 \cdot D^2} \cdot \left(A^2 + {N_u}^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)}{C \cdot D \cdot \sqrt{\left(A^2 + {N_u}^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: $$\frac{N_u^2 - N_u + 1}{\sqrt{\left(N_u^2 - N_u + 1\right)^2}}$$

1, 0, 0, 0: $$\frac{A^2 - A \cdot N_u + N_u^2}{\sqrt{\left(A^2 - A \cdot N_u + N_u^2\right)^2}}$$

0, 2, 0, 0: $$\frac{N_u^2 - 2 \cdot N_u + B \cdot N_u + 1}{\sqrt{\left(N_u^2 - 2 \cdot N_u + B \cdot N_u + 1\right)^2}}$$

1, 2, 0, 0: $$\frac{A^2 - N_u + N_u^2 - A \cdot N_u + B \cdot N_u}{\sqrt{\left(A^2 - N_u + N_u^2 - A \cdot N_u + B \cdot N_u\right)^2}}$$

0, 0, 3, 0: $$\frac{\sqrt{C^2} \cdot \left(N_u^2 - C \cdot N_u + 1\right)}{C \cdot \sqrt{\left(N_u^2 - C \cdot N_u + 1\right)^2}}$$

1, 0, 3, 0: $$\frac{\sqrt{C^2} \cdot \left(N_u + A^2 + N_u^2 - A \cdot N_u - C \cdot N_u\right)}{C \cdot \sqrt{\left(N_u + A^2 + N_u^2 - A \cdot N_u - C \cdot N_u\right)^2}}$$

0, 2, 3, 0: $$\frac{\sqrt{C^2} \cdot \left(N_u^2 - N_u + B \cdot N_u - C \cdot N_u + 1\right)}{C \cdot \sqrt{\left(N_u^2 - N_u + B \cdot N_u - C \cdot N_u + 1\right)^2}}$$

1, 2, 3, 0: $$\frac{\sqrt{C^2} \cdot \left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)}{C \cdot \sqrt{\left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)^2}}$$

0, 0, 0, 4: $$\frac{\sqrt{D^2} \cdot \left(N_u^2 - N_u + 1\right)}{D \cdot \sqrt{\left(N_u^2 - N_u + 1\right)^2}}$$

1, 0, 0, 4: $$\frac{\sqrt{D^2} \cdot \left(A^2 - A \cdot N_u + N_u^2\right)}{D \cdot \sqrt{\left(A^2 - A \cdot N_u + N_u^2\right)^2}}$$

0, 2, 0, 4: $$\frac{\sqrt{D^2} \cdot \left(N_u^2 - 2 \cdot N_u + B \cdot N_u + 1\right)}{D \cdot \sqrt{\left(N_u^2 - 2 \cdot N_u + B \cdot N_u + 1\right)^2}}$$

1, 2, 0, 4: $$\frac{\sqrt{D^2} \cdot \left(A^2 - N_u + N_u^2 - A \cdot N_u + B \cdot N_u\right)}{D \cdot \sqrt{\left(A^2 - N_u + N_u^2 - A \cdot N_u + B \cdot N_u\right)^2}}$$

0, 0, 3, 4: $$\frac{\sqrt{C^2 \cdot D^2} \cdot \left(N_u^2 - C \cdot N_u + 1\right)}{C \cdot D \cdot \sqrt{\left(N_u^2 - C \cdot N_u + 1\right)^2}}$$

1, 0, 3, 4: $$\frac{\sqrt{C^2 \cdot D^2} \cdot \left(N_u + A^2 + N_u^2 - A \cdot N_u - C \cdot N_u\right)}{C \cdot D \cdot \sqrt{\left(N_u + A^2 + N_u^2 - A \cdot N_u - C \cdot N_u\right)^2}}$$

0, 2, 3, 4: $$\frac{\sqrt{C^2 \cdot D^2} \cdot \left(N_u^2 - N_u + B \cdot N_u - C \cdot N_u + 1\right)}{C \cdot D \cdot \sqrt{\left(N_u^2 - N_u + B \cdot N_u - C \cdot N_u + 1\right)^2}}$$

1, 2, 3, 4: $$\frac{\sqrt{C^2 \cdot D^2} \cdot \left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)}{C \cdot D \cdot \sqrt{\left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)^2}}$$

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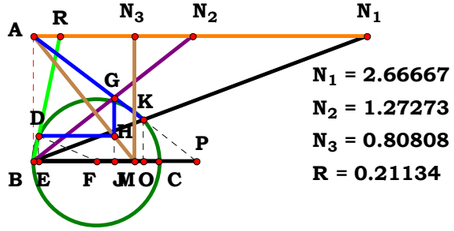


Unit. $AB := 1$ **Given.** $N_1 := 2.66667$ $N_2 := 1.27273$ $N_3 := .80808$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u^4 - N_u^2 \cdot \sqrt{\left(3 \cdot A^2 + 3 \cdot N_u^2 - 3 \cdot A \cdot N_u + 3 \cdot B \cdot N_u - 2 \cdot C \cdot N_u\right) \cdot \left(A \cdot N_u - N_u^2 - A^2 - B \cdot N_u + 2 \cdot C \cdot N_u\right)} + N_u^2 \cdot \left(A^2 - N_u \cdot A + B \cdot N_u\right)}{2 \cdot N_u^2 \cdot \left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)} = 0.211336$$

$$Num := \frac{N_u^4 - N_u^2 \cdot \sqrt{\left(3 \cdot A^2 + 3 \cdot N_u^2 - 3 \cdot A \cdot N_u + 3 \cdot B \cdot N_u - 2 \cdot C \cdot N_u\right) \cdot \left(A \cdot N_u - N_u^2 - A^2 - B \cdot N_u + 2 \cdot C \cdot N_u\right)} + N_u^2 \cdot \left(A^2 - N_u \cdot A + B \cdot N_u\right)}{\sqrt{\left[N_u^4 - N_u^2 \cdot \sqrt{\left(3 \cdot A^2 + 3 \cdot N_u^2 - 3 \cdot A \cdot N_u + 3 \cdot B \cdot N_u - 2 \cdot C \cdot N_u\right) \cdot \left(A \cdot N_u - N_u^2 - A^2 - B \cdot N_u + 2 \cdot C \cdot N_u\right)} + N_u^2 \cdot \left(A^2 - N_u \cdot A + B \cdot N_u\right)\right]^2}}$$

$$Den := \frac{2 \cdot N_u^2 \cdot \left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)}{\sqrt{\left[2 \cdot N_u^2 \cdot \left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{\sqrt{N_u^4 \cdot \left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)^2} \cdot \left[A^2 - \sqrt{-\left(3 \cdot A^2 + 3 \cdot N_u^2 - 3 \cdot A \cdot N_u + 3 \cdot B \cdot N_u - 2 \cdot C \cdot N_u\right) \cdot \left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - 2 \cdot C \cdot N_u\right)} + N_u^2 - A \cdot N_u + B \cdot N_u\right]}{\sqrt{\left[N_u^4 - N_u^2 \cdot \sqrt{-\left(3 \cdot A^2 + 3 \cdot N_u^2 - 3 \cdot A \cdot N_u + 3 \cdot B \cdot N_u - 2 \cdot C \cdot N_u\right) \cdot \left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - 2 \cdot C \cdot N_u\right)} + N_u^2 \cdot \left(A^2 - N_u \cdot A + B \cdot N_u\right)\right]^2} \cdot \left(A^2 + N_u^2 - A \cdot N_u + B \cdot N_u - C \cdot N_u\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{\sqrt{N_u^4\cdot\left(N_u^2-N_u+1\right)^2}\cdot\left[N_u^2-\sqrt{-\left(N_u^2-2\cdot N_u+1\right)\cdot\left(3\cdot N_u^2-2\cdot N_u+3\right)}+1\right]}{\sqrt{\left[N_u^2+N_u^4-N_u^2\cdot\sqrt{-\left(N_u^2-2\cdot N_u+1\right)\cdot\left(3\cdot N_u^2-2\cdot N_u+3\right)}\right]^2}\cdot\left(N_u^2-N_u+1\right)}$$

1, 0, 0:

$$\frac{\sqrt{N_u^4\cdot\left(A^2-A\cdot N_u+N_u^2\right)^2}\cdot\left[N_u+A^2+N_u^2-A\cdot N_u-\sqrt{\left(-A^2+A\cdot N_u-N_u^2+N_u\right)\cdot\left(3\cdot A^2-3\cdot A\cdot N_u+3\cdot N_u^2+N_u\right)}\right]}{\sqrt{\left[N_u^2\cdot\left(A^2-N_u\cdot A+N_u\right)+N_u^4-N_u^2\cdot\sqrt{\left(A\cdot N_u-A^2-N_u^2+N_u\right)\cdot\left(3\cdot A^2-3\cdot A\cdot N_u+3\cdot N_u^2+N_u\right)}\right]^2}\cdot\left(A^2-A\cdot N_u+N_u^2\right)}$$

0, 2, 0:

$$\frac{\sqrt{N_u^4\cdot\left(N_u^2-2\cdot N_u+B\cdot N_u+1\right)^2}\cdot\left[N_u^2-N_u+B\cdot N_u-\sqrt{-\left(N_u^2-3\cdot N_u+B\cdot N_u+1\right)\cdot\left(3\cdot N_u^2-5\cdot N_u+3\cdot B\cdot N_u+3\right)}+1\right]}{\sqrt{\left[N_u^4+N_u^2\cdot\left(B\cdot N_u-N_u+1\right)-N_u^2\cdot\sqrt{-\left(N_u^2-3\cdot N_u+B\cdot N_u+1\right)\cdot\left(3\cdot N_u^2-5\cdot N_u+3\cdot B\cdot N_u+3\right)}\right]^2}\cdot\left(N_u^2-2\cdot N_u+B\cdot N_u+1\right)}$$

1, 2, 0:

$$\frac{\sqrt{N_u^4\cdot\left(A^2-N_u+N_u^2-A\cdot N_u+B\cdot N_u\right)^2}\cdot\left[A^2+N_u^2-A\cdot N_u+B\cdot N_u-\sqrt{-\left(3\cdot A^2-2\cdot N_u+3\cdot N_u^2-3\cdot A\cdot N_u+3\cdot B\cdot N_u\right)\cdot\left(A^2-2\cdot N_u+N_u^2-A\cdot N_u+B\cdot N_u\right)}\right]}{\sqrt{\left[N_u^4-N_u^2\cdot\sqrt{-\left(3\cdot A^2-2\cdot N_u+3\cdot N_u^2-3\cdot A\cdot N_u+3\cdot B\cdot N_u\right)\cdot\left(A^2-2\cdot N_u+N_u^2-A\cdot N_u+B\cdot N_u\right)}+N_u^2\cdot\left(A^2-N_u\cdot A+B\cdot N_u\right)\right]^2}\cdot\left(A^2-N_u+N_u^2-A\cdot N_u+B\cdot N_u\right)}$$

0, 0, 3:

$$\frac{\sqrt{N_u^4\cdot\left(N_u^2-C\cdot N_u+1\right)^2}\cdot\left[N_u^2-\sqrt{-\left(3\cdot N_u^2-2\cdot C\cdot N_u+3\right)\cdot\left(N_u^2-2\cdot C\cdot N_u+1\right)}+1\right]}{\sqrt{\left[N_u^2+N_u^4-N_u^2\cdot\sqrt{-\left(3\cdot N_u^2-2\cdot C\cdot N_u+3\right)\cdot\left(N_u^2-2\cdot C\cdot N_u+1\right)}\right]^2}\cdot\left(N_u^2-C\cdot N_u+1\right)}$$

1, 0, 3:

$$\frac{\sqrt{N_u^4\cdot\left(N_u+A^2+N_u^2-A\cdot N_u-C\cdot N_u\right)^2}\cdot\left[N_u-\sqrt{-\left(3\cdot N_u+3\cdot A^2+3\cdot N_u^2-3\cdot A\cdot N_u-2\cdot C\cdot N_u\right)\cdot\left(N_u+A^2+N_u^2-A\cdot N_u-2\cdot C\cdot N_u\right)}+A^2+N_u^2-A\cdot N_u\right]}{\sqrt{\left[N_u^2\cdot\left(A^2-N_u\cdot A+N_u\right)+N_u^4-N_u^2\cdot\sqrt{-\left(3\cdot N_u+3\cdot A^2+3\cdot N_u^2-3\cdot A\cdot N_u-2\cdot C\cdot N_u\right)\cdot\left(N_u+A^2+N_u^2-A\cdot N_u-2\cdot C\cdot N_u\right)}\right]^2}\cdot\left(N_u+A^2+N_u^2-A\cdot N_u-C\cdot N_u\right)}$$

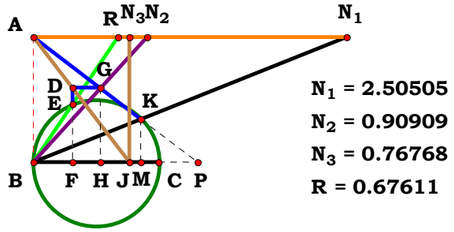
0, 2, 3:

$$\frac{\sqrt{N_u^4\cdot\left(N_u^2-N_u+B\cdot N_u-C\cdot N_u+1\right)^2}\cdot\left[N_u^2-N_u+B\cdot N_u-\sqrt{-\left(N_u^2-N_u+B\cdot N_u-2\cdot C\cdot N_u+1\right)\cdot\left(3\cdot N_u^2-3\cdot N_u+3\cdot B\cdot N_u-2\cdot C\cdot N_u+3\right)}+1\right]}{\sqrt{\left[N_u^4+N_u^2\cdot\left(B\cdot N_u-N_u+1\right)-N_u^2\cdot\sqrt{-\left(N_u^2-N_u+B\cdot N_u-2\cdot C\cdot N_u+1\right)\cdot\left(3\cdot N_u^2-3\cdot N_u+3\cdot B\cdot N_u-2\cdot C\cdot N_u+3\right)}\right]^2}\cdot\left(N_u^2-N_u+B\cdot N_u-C\cdot N_u+1\right)}$$

1, 2, 3:

$$\frac{\sqrt{N_u^4\cdot\left(A^2+N_u^2-A\cdot N_u+B\cdot N_u-C\cdot N_u\right)^2}\cdot\left[A^2-\sqrt{-\left(3\cdot A^2+3\cdot N_u^2-3\cdot A\cdot N_u+3\cdot B\cdot N_u-2\cdot C\cdot N_u\right)\cdot\left(A^2+N_u^2-A\cdot N_u+B\cdot N_u-2\cdot C\cdot N_u\right)}+N_u^2-A\cdot N_u+B\cdot N_u\right]}{\sqrt{\left[N_u^4-N_u^2\cdot\sqrt{-\left(3\cdot A^2+3\cdot N_u^2-3\cdot A\cdot N_u+3\cdot B\cdot N_u-2\cdot C\cdot N_u\right)\cdot\left(A^2+N_u^2-A\cdot N_u+B\cdot N_u-2\cdot C\cdot N_u\right)}+N_u^2\cdot\left(A^2-N_u\cdot A+B\cdot N_u\right)\right]^2}\cdot\left(A^2+N_u^2-A\cdot N_u+B\cdot N_u-C\cdot N_u\right)}$$

3OBT5R11



Unit. $AB := 1$ **Given.** $N_1 := 2.50505$ $N_2 := .90909$ $N_3 := .76768$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right) \cdot \left(C \cdot A^2 - A^2 \cdot N_u + A \cdot N_u^{\,2} - C \cdot A \cdot N_u - N_u^{\,3} + C \cdot N_u^{\,2} + B \cdot C \cdot N_u\right)}} = 0.676107$$

$$Num := \frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{\left[N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)\right]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right) \cdot \left(C \cdot A^2 - A^2 \cdot N_u + A \cdot N_u^{\,2} - C \cdot A \cdot N_u - N_u^{\,3} + C \cdot N_u^{\,2} + B \cdot C \cdot N_u\right)}}{\sqrt{\left[\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right) \cdot \left(C \cdot A^2 - A^2 \cdot N_u + A \cdot N_u^{\,2} - C \cdot A \cdot N_u - N_u^{\,3} + C \cdot N_u^{\,2} + B \cdot C \cdot N_u\right)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u \cdot \left(N_u^{\,2} - N_u + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - N_u + 1\right)^2}}$$

1, 0, 0:

$$\frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)^2}}$$

0, 2, 0:

$$\frac{N_u \cdot \left(N_u^{\,2} - N_u + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - N_u + 1\right)^2}}$$

1, 2, 0:

$$\frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)^2}}$$

0, 0, 3:

$$\frac{N_u \cdot \left(N_u^{\,2} - N_u + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - N_u + 1\right)^2}}$$

1, 0, 3:

$$\frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)^2}}$$

0, 2, 3:

$$\frac{N_u \cdot \left(N_u^{\,2} - N_u + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - N_u + 1\right)^2}}$$

1, 2, 3:

$$\frac{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)^2}}$$

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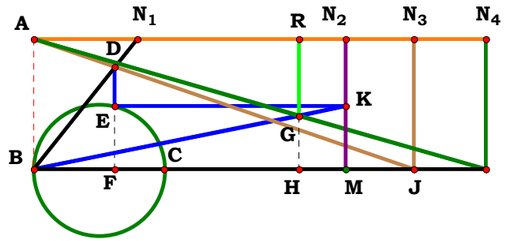

$N_1 = 0.79164$
$N_2 = 2.38980$
$N_3 = 2.91756$
$N_4 = 3.46728$
$R = 2.03568$

Unit. $AB := 1$ Given. $N_1 := .79164$ $N_2 := 2.38980$ $N_3 := 2.91756$

$N_4 := 3.46728$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A + C)}{B \cdot \sqrt{N_u \cdot (A + C - N_u)} + A \cdot D + C \cdot D} = 2.035677$$

$$Num := \frac{N_u \cdot (A + C)}{\sqrt{\left[N_u \cdot (A + C)\right]^2}}$$

$$Den := \frac{B \cdot \sqrt{N_u \cdot (A + C - N_u)} + A \cdot D + C \cdot D}{\sqrt{\left[B \cdot \sqrt{N_u \cdot (A + C - N_u)} + A \cdot D + C \cdot D\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot (A + C) \cdot \sqrt{\left[B \cdot \sqrt{N_u \cdot (A + C - N_u)} + A \cdot D + C \cdot D\right]^2}}{\sqrt{N_u^{\,2} \cdot (A + C)^2} \cdot \left[B \cdot \sqrt{N_u \cdot (A + C - N_u)} + A \cdot D + C \cdot D\right]} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:

$$\frac{N_u \cdot \sqrt{\left[\sqrt{-N_u \cdot (N_u - 2)} + 2\right]^2}}{\sqrt{{N_u}^2} \cdot \left[\sqrt{-N_u \cdot (N_u - 2)} + 2\right]}$$

1, 0, 0, 0:

$$\frac{N_u \cdot (A+1) \cdot \sqrt{\left[A + \sqrt{N_u \cdot (A - N_u + 1)} + 1\right]^2}}{\sqrt{{N_u}^2 \cdot (A+1)^2} \cdot \left[A + \sqrt{N_u \cdot (A - N_u + 1)} + 1\right]}$$

0, 2, 0, 0:

$$\frac{N_u \cdot \sqrt{\left[B \cdot \sqrt{-N_u \cdot (N_u - 2)} + 2\right]^2}}{\sqrt{{N_u}^2} \cdot \left[B \cdot \sqrt{-N_u \cdot (N_u - 2)} + 2\right]}$$

1, 2, 0, 0:

$$\frac{N_u \cdot \sqrt{\left[A + B \cdot \sqrt{N_u \cdot (A - N_u + 1)} + 1\right]^2} \cdot (A+1)}{\sqrt{{N_u}^2 \cdot (A+1)^2} \cdot \left[A + B \cdot \sqrt{N_u \cdot (A - N_u + 1)} + 1\right]}$$

0, 0, 3, 0:

$$\frac{N_u \cdot (C+1) \cdot \sqrt{\left[C + \sqrt{N_u \cdot (C - N_u + 1)} + 1\right]^2}}{\sqrt{{N_u}^2 \cdot (C+1)^2} \cdot \left[C + \sqrt{N_u \cdot (C - N_u + 1)} + 1\right]}$$

1, 0, 3, 0:

$$\frac{N_u \cdot (A+C) \cdot \sqrt{\left[A + C + \sqrt{N_u \cdot (A + C - N_u)}\right]^2}}{\sqrt{{N_u}^2 \cdot (A+C)^2} \cdot \left[A + C + \sqrt{N_u \cdot (A + C - N_u)}\right]}$$

0, 2, 3, 0:

$$\frac{N_u \cdot \sqrt{\left[C + B \cdot \sqrt{N_u \cdot (C - N_u + 1)} + 1\right]^2} \cdot (C+1)}{\sqrt{{N_u}^2 \cdot (C+1)^2} \cdot \left[C + B \cdot \sqrt{N_u \cdot (C - N_u + 1)} + 1\right]}$$

1, 2, 3, 0:

$$\frac{N_u \cdot (A+C) \cdot \sqrt{\left[A + C + B \cdot \sqrt{N_u \cdot (A + C - N_u)}\right]^2}}{\sqrt{{N_u}^2 \cdot (A+C)^2} \cdot \left[A + C + B \cdot \sqrt{N_u \cdot (A + C - N_u)}\right]}$$

0, 0, 0, 4:

$$\frac{N_u \cdot \sqrt{\left[2 \cdot D + \sqrt{-N_u \cdot (N_u - 2)}\right]^2}}{\sqrt{{N_u}^2} \cdot \left[2 \cdot D + \sqrt{-N_u \cdot (N_u - 2)}\right]}$$

1, 0, 0, 4:

$$\frac{N_u \cdot (A+1) \cdot \sqrt{\left[D + \sqrt{N_u \cdot (A - N_u + 1)} + A \cdot D\right]^2}}{\sqrt{{N_u}^2 \cdot (A+1)^2} \cdot \left[D + \sqrt{N_u \cdot (A - N_u + 1)} + A \cdot D\right]}$$

0, 2, 0, 4:

$$\frac{N_u \cdot \sqrt{\left[2 \cdot D + B \cdot \sqrt{-N_u \cdot (N_u - 2)}\right]^2}}{\sqrt{{N_u}^2} \cdot \left[2 \cdot D + B \cdot \sqrt{-N_u \cdot (N_u - 2)}\right]}$$

1, 2, 0, 4:

$$\frac{N_u \cdot (A+1) \cdot \sqrt{\left[D + A \cdot D + B \cdot \sqrt{N_u \cdot (A - N_u + 1)}\right]^2}}{\sqrt{{N_u}^2 \cdot (A+1)^2} \cdot \left[D + A \cdot D + B \cdot \sqrt{N_u \cdot (A - N_u + 1)}\right]}$$

0, 0, 3, 4:

$$\frac{N_u \cdot (C+1) \cdot \sqrt{\left[D + \sqrt{N_u \cdot (C - N_u + 1)} + C \cdot D\right]^2}}{\sqrt{{N_u}^2 \cdot (C+1)^2} \cdot \left[D + \sqrt{N_u \cdot (C - N_u + 1)} + C \cdot D\right]}$$

1, 0, 3, 4:

$$\frac{N_u \cdot \sqrt{\left[\sqrt{N_u \cdot (A + C - N_u)} + A \cdot D + C \cdot D\right]^2} \cdot (A+C)}{\sqrt{{N_u}^2 \cdot (A+C)^2} \cdot \left[\sqrt{N_u \cdot (A + C - N_u)} + A \cdot D + C \cdot D\right]}$$

0, 2, 3, 4:

$$\frac{N_u \cdot (C+1) \cdot \sqrt{\left[D + C \cdot D + B \cdot \sqrt{N_u \cdot (C - N_u + 1)}\right]^2}}{\sqrt{{N_u}^2 \cdot (C+1)^2} \cdot \left[D + C \cdot D + B \cdot \sqrt{N_u \cdot (C - N_u + 1)}\right]}$$

1, 2, 3, 4:

$$\frac{N_u \cdot (A+C) \cdot \sqrt{\left[B \cdot \sqrt{N_u \cdot (A + C - N_u)} + A \cdot D + C \cdot D\right]^2}}{\sqrt{{N_u}^2 \cdot (A+C)^2} \cdot \left[B \cdot \sqrt{N_u \cdot (A + C - N_u)} + A \cdot D + C \cdot D\right]}$$

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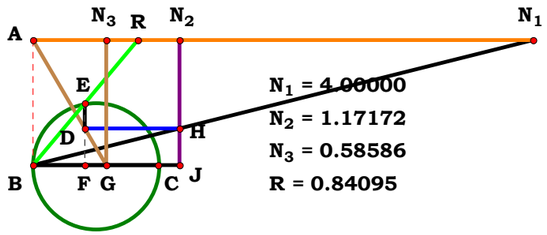


Unit. $AB := 1$ Given. $N_1 := 4.00000$ $N_2 := 1.17172$ $N_3 := .58586$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (B - A)}{\sqrt{N_u \cdot (B - A) \cdot (B \cdot C + A \cdot N_u - B \cdot N_u)}} = 0.840949$$

$$Num := \frac{N_u \cdot (B - A)}{\sqrt{\left[N_u \cdot (B - A)\right]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot (B - A) \cdot (B \cdot C + A \cdot N_u - B \cdot N_u)}}{\sqrt{\left[\sqrt{N_u \cdot (B - A) \cdot (B \cdot C + A \cdot N_u - B \cdot N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot (B - A)}{\sqrt{N_u^2 \cdot (A - B)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: 0

0, 0, 3: 0

1, 0, 0: $$-\frac{N_u \cdot (A-1)}{\sqrt{N_u{}^2 \cdot (A-1)^2}}$$

1, 0, 3: $$-\frac{N_u \cdot (A-1)}{\sqrt{N_u{}^2 \cdot (A-1)^2}}$$

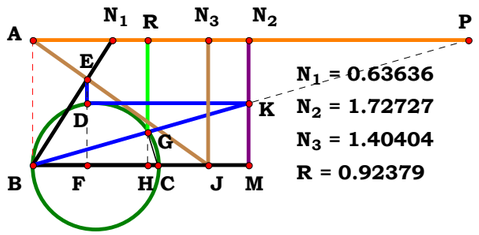
0, 2, 0: $$\frac{N_u \cdot (B-1)}{\sqrt{N_u{}^2 \cdot (B-1)^2}}$$

0, 2, 3: $$\frac{N_u \cdot (B-1)}{\sqrt{N_u{}^2 \cdot (B-1)^2}}$$

1, 2, 0: $$-\frac{N_u \cdot (A-B)}{\sqrt{N_u{}^2 \cdot (A-B)^2}}$$

1, 2, 3: $$\frac{N_u \cdot (B-A)}{\sqrt{N_u{}^2 \cdot (A-B)^2}}$$

3OBT6R2



Unit. $AB := 1$ Given. $N_1 := .63636$ $N_2 := 1.72727$ $N_3 := 1.40404$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (A+C)^2}{N_u \cdot A^2 + A \cdot B^2 + 2 \cdot N_u \cdot A \cdot C + B^2 \cdot C - N_u \cdot B^2 + N_u \cdot C^2} = 0.923786$$

$$Num := \frac{N_u \cdot (A+C)^2}{\sqrt{\left[N_u \cdot (A+C)^2\right]^2}}$$

$$Den := \frac{N_u \cdot A^2 + A \cdot B^2 + 2 \cdot N_u \cdot A \cdot C + B^2 \cdot C - N_u \cdot B^2 + N_u \cdot C^2}{\sqrt{\left(N_u \cdot A^2 + A \cdot B^2 + 2 \cdot N_u \cdot A \cdot C + B^2 \cdot C - N_u \cdot B^2 + N_u \cdot C^2\right)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot (A+C)^2 \cdot \sqrt{\left(N_u \cdot A^2 + A \cdot B^2 + 2 \cdot N_u \cdot A \cdot C + B^2 \cdot C - N_u \cdot B^2 + N_u \cdot C^2\right)^2}}{\sqrt{N_u^2 \cdot (A+C)^4} \cdot \left(N_u \cdot A^2 + A \cdot B^2 + 2 \cdot N_u \cdot A \cdot C + B^2 \cdot C - N_u \cdot B^2 + N_u \cdot C^2\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u \cdot \sqrt{\left(3 \cdot N_u + 2\right)^2}}{\sqrt{N_u^{\,2}} \cdot \left(3 \cdot N_u + 2\right)}$$

1, 0, 0:

$$\frac{N_u \cdot \sqrt{\left(A + 2 \cdot A \cdot N_u + A^2 \cdot N_u + 1\right)^2} \cdot (A+1)^2}{\sqrt{N_u^{\,2} \cdot (A+1)^4} \cdot \left(A + 2 \cdot A \cdot N_u + A^2 \cdot N_u + 1\right)}$$

0, 2, 0:

$$\frac{N_u \cdot \sqrt{\left(4 \cdot N_u + 2 \cdot B^2 - B^2 \cdot N_u\right)^2}}{\sqrt{N_u^{\,2}} \cdot \left(4 \cdot N_u + 2 \cdot B^2 - B^2 \cdot N_u\right)}$$

1, 2, 0:

$$\frac{N_u \cdot (A+1)^2 \cdot \sqrt{\left(N_u + B^2 + 2 \cdot A \cdot N_u + A \cdot B^2 + A^2 \cdot N_u - B^2 \cdot N_u\right)^2}}{\sqrt{N_u^{\,2} \cdot (A+1)^4} \cdot \left(N_u + B^2 + 2 \cdot A \cdot N_u + A \cdot B^2 + A^2 \cdot N_u - B^2 \cdot N_u\right)}$$

0, 0, 3:

$$\frac{N_u \cdot \sqrt{\left(C + 2 \cdot C \cdot N_u + C^2 \cdot N_u + 1\right)^2} \cdot (C+1)^2}{\sqrt{N_u^{\,2} \cdot (C+1)^4} \cdot \left(C + 2 \cdot C \cdot N_u + C^2 \cdot N_u + 1\right)}$$

1, 0, 3:

$$\frac{N_u \cdot (A+C)^2 \cdot \sqrt{\left(N_u \cdot A^2 + 2 \cdot N_u \cdot A \cdot C + A + N_u \cdot C^2 + C - N_u\right)^2}}{\sqrt{N_u^{\,2} \cdot (A+C)^4} \cdot \left(N_u \cdot A^2 + 2 \cdot N_u \cdot A \cdot C + A + N_u \cdot C^2 + C - N_u\right)}$$

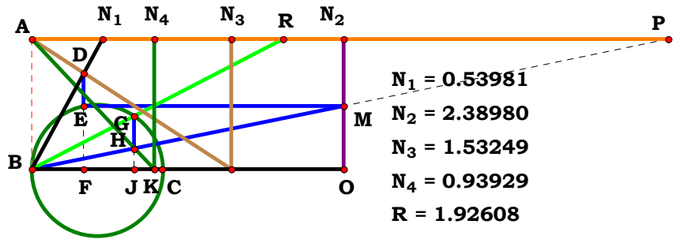
0, 2, 3:

$$\frac{N_u \cdot (C+1)^2 \cdot \sqrt{\left(N_u + B^2 + 2 \cdot C \cdot N_u + B^2 \cdot C - B^2 \cdot N_u + C^2 \cdot N_u\right)^2}}{\sqrt{N_u^{\,2} \cdot (C+1)^4} \cdot \left(N_u + B^2 + 2 \cdot C \cdot N_u + B^2 \cdot C - B^2 \cdot N_u + C^2 \cdot N_u\right)}$$

1, 2, 3:

$$\frac{N_u \cdot (A+C)^2 \cdot \sqrt{\left(N_u \cdot A^2 + A \cdot B^2 + 2 \cdot N_u \cdot A \cdot C + B^2 \cdot C - N_u \cdot B^2 + N_u \cdot C^2\right)^2}}{\sqrt{N_u^{\,2} \cdot (A+C)^4} \cdot \left(N_u \cdot A^2 + A \cdot B^2 + 2 \cdot N_u \cdot A \cdot C + B^2 \cdot C - N_u \cdot B^2 + N_u \cdot C^2\right)}$$

3OBT6R3



Unit. $AB := 1$ **Given.** $N_1 := .53981$ $N_2 := 2.38980$ $N_3 := 1.53249$

$N_4 := .93929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{N_u \cdot (A + C)}}{\sqrt{B \cdot \sqrt{A \cdot N_u - N_u^{\,2} + C \cdot N_u} + (A + C) \cdot (D - N_u)}} = 1.92607$$

$$Num := \frac{\sqrt{N_u \cdot (A + C)}}{\sqrt{\left[\sqrt{N_u \cdot (A + C)}\right]^2}}$$

$$Den := \frac{\sqrt{B \cdot \sqrt{A \cdot N_u - N_u^{\,2} + C \cdot N_u} + (A + C) \cdot (D - N_u)}}{\sqrt{\left[\sqrt{B \cdot \sqrt{A \cdot N_u - N_u^{\,2} + C \cdot N_u} + (A + C) \cdot (D - N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

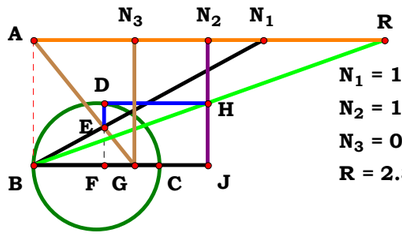
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$1 = 1$

$L - 1 = 0$

3OBT6R4



$N_1 = 1.83838$
$N_2 = 1.39394$
$N_3 = 0.80808$
$R = 2.80910$

Unit. $AB := 1$ Given. $N_1 := 1.83838$ $N_2 := 1.39394$ $N_3 := .80808$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (A + C)}{B \cdot \sqrt{N_u \cdot (A + C - N_u)}} = 2.809098$$

$$Num := \frac{N_u \cdot (A + C)}{\sqrt{\left[N_u \cdot (A + C)\right]^2}}$$

$$Den := \frac{B \cdot \sqrt{N_u \cdot (A + C - N_u)}}{\sqrt{\left[B \cdot \sqrt{N_u \cdot (A + C - N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot (A + C) \cdot \sqrt{B^2 \cdot N_u \cdot (A + C - N_u)}}{B \cdot \sqrt{N_u{}^2 \cdot (A + C)^2} \cdot \sqrt{N_u \cdot (A + C - N_u)}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u}{\sqrt{N_u^{\,2}}}$$

1, 0, 0: $$\frac{N_u \cdot (A+1)}{\sqrt{N_u^{\,2} \cdot (A+1)^2}}$$

0, 2, 0: $$\frac{N_u \cdot \sqrt{-B^2 \cdot N_u \cdot (N_u - 2)}}{B \cdot \sqrt{N_u^{\,2}} \cdot \sqrt{-N_u \cdot (N_u - 2)}}$$

1, 2, 0: $$\frac{N_u \cdot (A+1) \cdot \sqrt{B^2 \cdot N_u \cdot (A - N_u + 1)}}{B \cdot \sqrt{N_u \cdot (A - N_u + 1)} \cdot \sqrt{N_u^{\,2} \cdot (A+1)^2}}$$

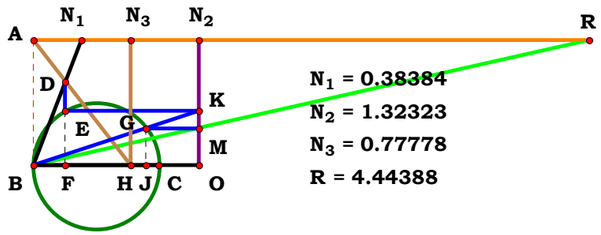
0, 0, 3: $$\frac{N_u \cdot (C+1)}{\sqrt{N_u^{\,2} \cdot (C+1)^2}}$$

1, 0, 3: $$\frac{N_u \cdot (A+C)}{\sqrt{N_u^{\,2} \cdot (A+C)^2}}$$

0, 2, 3: $$\frac{N_u \cdot (C+1) \cdot \sqrt{B^2 \cdot N_u \cdot (C - N_u + 1)}}{B \cdot \sqrt{N_u \cdot (C - N_u + 1)} \cdot \sqrt{N_u^{\,2} \cdot (C+1)^2}}$$

1, 2, 3: $$\frac{N_u \cdot (A+C) \cdot \sqrt{B^2 \cdot N_u \cdot (A + C - N_u)}}{B \cdot \sqrt{N_u^{\,2} \cdot (A+C)^2} \cdot \sqrt{N_u \cdot (A + C - N_u)}}$$

3OBT6R5



$N_1 = 0.38384$
$N_2 = 1.32323$
$N_3 = 0.77778$
$R = 4.44388$

Unit. $AB := 1$ Given. $N_1 := .38384$ $N_2 := 1.32323$ $N_3 := .77778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left[N_u \cdot (A - B + C) \cdot (A + B + C) + B^2 \cdot (A + C)\right]}{B^2 \cdot (A + C) \cdot \sqrt{N_u \cdot (A + C - N_u)}} = 4.443864$$

$$Num := \frac{N_u \cdot \left[N_u \cdot (A - B + C) \cdot (A + B + C) + B^2 \cdot (A + C)\right]}{\sqrt{\left[N_u \cdot \left[N_u \cdot (A - B + C) \cdot (A + B + C) + B^2 \cdot (A + C)\right]\right]^2}}$$

$$Den := \frac{B^2 \cdot (A + C) \cdot \sqrt{N_u \cdot (A + C - N_u)}}{\sqrt{\left[B^2 \cdot (A + C) \cdot \sqrt{N_u \cdot (A + C - N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(N_u \cdot A^2 + A \cdot B^2 + 2 \cdot N_u \cdot A \cdot C + B^2 \cdot C - N_u \cdot B^2 + N_u \cdot C^2\right) \cdot \sqrt{B^4 \cdot N_u \cdot (A + C)^2 \cdot (A + C - N_u)}}{B^2 \cdot \sqrt{N_u^2 \cdot \left[B^2 \cdot (A + C) + N_u \cdot (A - B + C) \cdot (A + B + C)\right]^2} \cdot (A + C) \cdot \sqrt{N_u \cdot (A + C - N_u)}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u \cdot (3 \cdot N_u + 2)}{\sqrt{N_u^{\,2} \cdot (3 \cdot N_u + 2)^2}}$$

1, 0, 0:

$$\frac{N_u \cdot \sqrt{N_u \cdot (A+1)^2 \cdot (A - N_u + 1)} \cdot (A + 2 \cdot A \cdot N_u + A^2 \cdot N_u + 1)}{(A+1) \cdot \sqrt{N_u^{\,2} \cdot [A + A \cdot N_u \cdot (A+2) + 1]^2} \cdot \sqrt{N_u \cdot (A - N_u + 1)}}$$

0, 2, 0:

$$\frac{N_u \cdot (4 \cdot N_u + 2 \cdot B^2 - B^2 \cdot N_u) \cdot \sqrt{-B^4 \cdot N_u \cdot (N_u - 2)}}{B^2 \cdot \sqrt{N_u^{\,2} \cdot [2 \cdot B^2 - N_u \cdot (B-2) \cdot (B+2)]^2} \cdot \sqrt{-N_u \cdot (N_u - 2)}}$$

1, 2, 0:

$$\frac{N_u \cdot \sqrt{B^4 \cdot N_u \cdot (A+1)^2 \cdot (A - N_u + 1)} \cdot (N_u + B^2 + 2 \cdot A \cdot N_u + A \cdot B^2 + A^2 \cdot N_u - B^2 \cdot N_u)}{B^2 \cdot (A+1) \cdot \sqrt{N_u^{\,2} \cdot [B^2 \cdot (A+1) + N_u \cdot (A+B+1) \cdot (A-B+1)]^2} \cdot \sqrt{N_u \cdot (A - N_u + 1)}}$$

0, 0, 3:

$$\frac{N_u \cdot \sqrt{N_u \cdot (C+1)^2 \cdot (C - N_u + 1)} \cdot (C + 2 \cdot C \cdot N_u + C^2 \cdot N_u + 1)}{(C+1) \cdot \sqrt{N_u^{\,2} \cdot [C + C \cdot N_u \cdot (C+2) + 1]^2} \cdot \sqrt{N_u \cdot (C - N_u + 1)}}$$

1, 0, 3:

$$\frac{N_u \cdot \sqrt{N_u \cdot (A+C)^2 \cdot (A + C - N_u)} \cdot (N_u \cdot A^2 + 2 \cdot N_u \cdot A \cdot C + A + N_u \cdot C^2 + C - N_u)}{(A+C) \cdot \sqrt{N_u^{\,2} \cdot [A + C + N_u \cdot (A + C - 1) \cdot (A + C + 1)]^2} \cdot \sqrt{N_u \cdot (A + C - N_u)}}$$

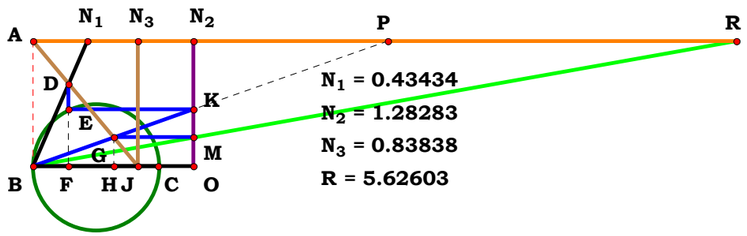
0, 2, 3:

$$\frac{N_u \cdot \sqrt{B^4 \cdot N_u \cdot (C+1)^2 \cdot (C - N_u + 1)} \cdot (N_u + B^2 + 2 \cdot C \cdot N_u + B^2 \cdot C - B^2 \cdot N_u + C^2 \cdot N_u)}{B^2 \cdot (C+1) \cdot \sqrt{N_u^{\,2} \cdot [B^2 \cdot (C+1) + N_u \cdot (B + C + 1) \cdot (C - B + 1)]^2} \cdot \sqrt{N_u \cdot (C - N_u + 1)}}$$

1, 2, 3:

$$\frac{N_u \cdot (N_u \cdot A^2 + A \cdot B^2 + 2 \cdot N_u \cdot A \cdot C + B^2 \cdot C - N_u \cdot B^2 + N_u \cdot C^2) \cdot \sqrt{B^4 \cdot N_u \cdot (A+C)^2 \cdot (A + C - N_u)}}{B^2 \cdot \sqrt{N_u^{\,2} \cdot [B^2 \cdot (A+C) + N_u \cdot (A - B + C) \cdot (A + B + C)]^2} \cdot (A+C) \cdot \sqrt{N_u \cdot (A + C - N_u)}}$$

3OBT6R6



Unit. $AB := 1$ Given. $N_1 := .43434$ $N_2 := 1.28283$ $N_3 := .83838$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left[B \cdot \sqrt{N_u \cdot (A + C - N_u)} + C^2 + A \cdot C\right]}{B^2 \cdot \sqrt{N_u \cdot (A + C - N_u)}} = 5.626069$$

$$Num := \frac{N_u \cdot \left[B \cdot \sqrt{N_u \cdot (A + C - N_u)} + C^2 + A \cdot C\right]}{\sqrt{\left[N_u \cdot \left[B \cdot \sqrt{N_u \cdot (A + C - N_u)} + C^2 + A \cdot C\right]\right]^2}}$$

$$Den := \frac{B^2 \cdot \sqrt{N_u \cdot (A + C - N_u)}}{\sqrt{\left[B^2 \cdot \sqrt{N_u \cdot (A + C - N_u)}\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[B \cdot \sqrt{N_u \cdot (A + C - N_u)} + C^2 + A \cdot C\right] \cdot \sqrt{B^4 \cdot N_u \cdot (A + C - N_u)}}{B^2 \cdot \sqrt{{N_u}^2 \cdot \left[B \cdot \sqrt{N_u \cdot (A + C - N_u)} + C^2 + A \cdot C\right]^2} \cdot \sqrt{N_u \cdot (A + C - N_u)}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u\cdot\left[\sqrt{-N_u\cdot\left(N_u-2\right)}+2\right]}{\sqrt{{N_u}^2\cdot\left[\sqrt{-N_u\cdot\left(N_u-2\right)}+2\right]^2}}$$

1, 0, 0:

$$\frac{N_u\cdot\left[A+\sqrt{N_u\cdot\left(A-N_u+1\right)}+1\right]}{\sqrt{{N_u}^2\cdot\left[A+\sqrt{N_u\cdot\left(A-N_u+1\right)}+1\right]^2}}$$

0, 2, 0:

$$\frac{N_u\cdot\left[B\cdot\sqrt{-N_u\cdot\left(N_u-2\right)}+2\right]\cdot\sqrt{-B^4\cdot N_u\cdot\left(N_u-2\right)}}{B^2\cdot\sqrt{{N_u}^2\cdot\left[B\cdot\sqrt{-N_u\cdot\left(N_u-2\right)}+2\right]^2}\cdot\sqrt{-N_u\cdot\left(N_u-2\right)}}$$

1, 2, 0:

$$\frac{N_u\cdot\sqrt{B^4\cdot N_u\cdot\left(A-N_u+1\right)}\cdot\left[A+B\cdot\sqrt{N_u\cdot\left(A-N_u+1\right)}+1\right]}{B^2\cdot\sqrt{{N_u}^2\cdot\left[A+B\cdot\sqrt{N_u\cdot\left(A-N_u+1\right)}+1\right]^2}\cdot\sqrt{N_u\cdot\left(A-N_u+1\right)}}$$

0, 0, 3:

$$\frac{N_u\cdot\left[C+\sqrt{N_u\cdot\left(C-N_u+1\right)}+C^2\right]}{\sqrt{{N_u}^2\cdot\left[C+\sqrt{N_u\cdot\left(C-N_u+1\right)}+C^2\right]^2}}$$

1, 0, 3:

$$\frac{N_u\cdot\left[C^2+\sqrt{N_u\cdot\left(A+C-N_u\right)}+A\cdot C\right]}{\sqrt{{N_u}^2\cdot\left[C^2+\sqrt{N_u\cdot\left(A+C-N_u\right)}+A\cdot C\right]^2}}$$

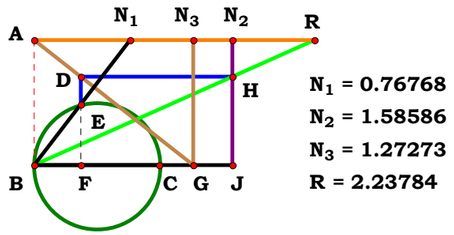
0, 2, 3:

$$\frac{N_u\cdot\left[C+C^2+B\cdot\sqrt{N_u\cdot\left(C-N_u+1\right)}\right]\cdot\sqrt{B^4\cdot N_u\cdot\left(C-N_u+1\right)}}{B^2\cdot\sqrt{N_u\cdot\left(C-N_u+1\right)}\cdot\sqrt{{N_u}^2\cdot\left[C+C^2+B\cdot\sqrt{N_u\cdot\left(C-N_u+1\right)}\right]^2}}$$

1, 2, 3:

$$\frac{N_u\cdot\left[B\cdot\sqrt{N_u\cdot\left(A+C-N_u\right)}+C^2+A\cdot C\right]\cdot\sqrt{B^4\cdot N_u\cdot\left(A+C-N_u\right)}}{B^2\cdot\sqrt{{N_u}^2\cdot\left[B\cdot\sqrt{N_u\cdot\left(A+C-N_u\right)}+C^2+A\cdot C\right]^2}\cdot\sqrt{N_u\cdot\left(A+C-N_u\right)}}$$

3OBT6R7



$N_1 = 0.76768$
$N_2 = 1.58586$
$N_3 = 1.27273$
$R = 2.23784$

Unit. $AB := 1$ **Given.** $N_1 := .76768$ $N_2 := 1.58586$ $N_3 := 1.27273$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + N_u^{\,2}\right)}{B \cdot \left(A^2 + N_u^{\,2} - C \cdot N_u\right)} = 2.237849$$

$$Num := \frac{N_u \cdot \left(A^2 + N_u^{\,2}\right)}{\sqrt{\left[N_u \cdot \left(A^2 + N_u^{\,2}\right)\right]^2}}$$

$$Den := \frac{B \cdot \left(A^2 + N_u^{\,2} - C \cdot N_u\right)}{\sqrt{\left[B \cdot \left(A^2 + N_u^{\,2} - C \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2 + N_u^{\,2} - C \cdot N_u\right)^2} \cdot \left(A^2 + N_u^{\,2}\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 + N_u^{\,2}\right)^2} \cdot \left(A^2 + N_u^{\,2} - C \cdot N_u\right)} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u \cdot \left(N_u^{\,2}+1\right) \cdot \sqrt{\left(N_u^{\,2}-N_u+1\right)^2}}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}$$

1, 0, 0:

$$\frac{N_u \cdot \left(A^2+N_u^{\,2}\right) \cdot \sqrt{\left(A^2+N_u^{\,2}-N_u\right)^2}}{\sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2+N_u^{\,2}-N_u\right)}$$

0, 2, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(N_u^{\,2}-N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}$$

1, 2, 0:

$$\frac{N_u \cdot \left(A^2+N_u^{\,2}\right) \cdot \sqrt{B^2 \cdot \left(A^2+N_u^{\,2}-N_u\right)^2}}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2+N_u^{\,2}-N_u\right)}$$

0, 0, 3:

$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2}-C \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-C \cdot N_u+1\right)}$$

1, 0, 3:

$$\frac{N_u \cdot \left(A^2+N_u^{\,2}\right) \cdot \sqrt{\left(A^2+N_u^{\,2}-C \cdot N_u\right)^2}}{\sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2+N_u^{\,2}-C \cdot N_u\right)}$$

0, 2, 3:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(N_u^{\,2}-C \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-C \cdot N_u+1\right)}$$

1, 2, 3:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2+N_u^{\,2}-C \cdot N_u\right)^2} \cdot \left(A^2+N_u^{\,2}\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2+N_u^{\,2}\right)^2} \cdot \left(A^2+N_u^{\,2}-C \cdot N_u\right)}$$

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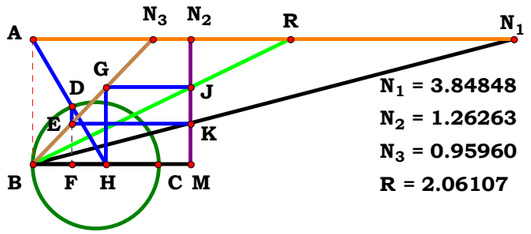

Unit. $AB := 1$ Given. $N_1 := 3.84848$ $N_2 := 1.26263$ $N_3 := .95960$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left[B \cdot C - \sqrt{N_u \cdot A \cdot (B \cdot C - A \cdot N_u)}\right]}{A \cdot B \cdot C} = 2.06106$$

$$Num := \frac{N_u \cdot \left[B \cdot C - \sqrt{N_u \cdot A \cdot (B \cdot C - A \cdot N_u)}\right]}{\sqrt{\left[N_u \cdot \left[B \cdot C - \sqrt{N_u \cdot A \cdot (B \cdot C - A \cdot N_u)}\right]\right]^2}}$$

$$Den := \frac{A \cdot B \cdot C}{\sqrt{(A \cdot B \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[B \cdot C - \sqrt{A \cdot N_u \cdot (B \cdot C - A \cdot N_u)}\right] \cdot \sqrt{A^2 \cdot B^2 \cdot C^2}}{A \cdot B \cdot C \cdot \sqrt{N_u{}^2 \cdot \left[\sqrt{A \cdot N_u \cdot (B \cdot C - A \cdot N_u)} - B \cdot C\right]^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$-\frac{N_u\cdot\left[\sqrt{-N_u\cdot\left(N_u-1\right)}-1\right]}{\sqrt{{N_u}^2\cdot\left[\sqrt{-N_u\cdot\left(N_u-1\right)}-1\right]^2}}$$

1, 0, 0:

$$-\frac{N_u\cdot\sqrt{A^2}\cdot\left[\sqrt{-A\cdot N_u\cdot\left(A\cdot N_u-1\right)}-1\right]}{A\cdot\sqrt{{N_u}^2\cdot\left[\sqrt{-A\cdot N_u\cdot\left(A\cdot N_u-1\right)}-1\right]^2}}$$

0, 2, 0:

$$\frac{N_u\cdot\sqrt{B^2}\cdot\left[B-\sqrt{N_u\cdot\left(B-N_u\right)}\right]}{B\cdot\sqrt{{N_u}^2\cdot\left[B-\sqrt{N_u\cdot\left(B-N_u\right)}\right]^2}}$$

1, 2, 0:

$$\frac{N_u\cdot\sqrt{A^2\cdot B^2}\cdot\left[B-\sqrt{A\cdot N_u\cdot\left(B-A\cdot N_u\right)}\right]}{A\cdot B\cdot\sqrt{{N_u}^2\cdot\left[B-\sqrt{A\cdot N_u\cdot\left(B-A\cdot N_u\right)}\right]^2}}$$

0, 0, 3:

$$\frac{N_u\cdot\sqrt{C^2}\cdot\left[C-\sqrt{N_u\cdot\left(C-N_u\right)}\right]}{C\cdot\sqrt{{N_u}^2\cdot\left[C-\sqrt{N_u\cdot\left(C-N_u\right)}\right]^2}}$$

1, 0, 3:

$$\frac{N_u\cdot\sqrt{A^2\cdot C^2}\cdot\left[C-\sqrt{A\cdot N_u\cdot\left(C-A\cdot N_u\right)}\right]}{A\cdot C\cdot\sqrt{{N_u}^2\cdot\left[C-\sqrt{A\cdot N_u\cdot\left(C-A\cdot N_u\right)}\right]^2}}$$

0, 2, 3:

$$-\frac{N_u\cdot\sqrt{B^2\cdot C^2}\cdot\left[\sqrt{-N_u\cdot\left(N_u-B\cdot C\right)}-B\cdot C\right]}{B\cdot C\cdot\sqrt{{N_u}^2\cdot\left[\sqrt{-N_u\cdot\left(N_u-B\cdot C\right)}-B\cdot C\right]^2}}$$

1, 2, 3:

$$\frac{N_u\cdot\left[B\cdot C-\sqrt{A\cdot N_u\cdot\left(B\cdot C-A\cdot N_u\right)}\right]\cdot\sqrt{A^2\cdot B^2\cdot C^2}}{A\cdot B\cdot C\cdot\sqrt{{N_u}^2\cdot\left[\sqrt{A\cdot N_u\cdot\left(B\cdot C-A\cdot N_u\right)}-B\cdot C\right]^2}}$$

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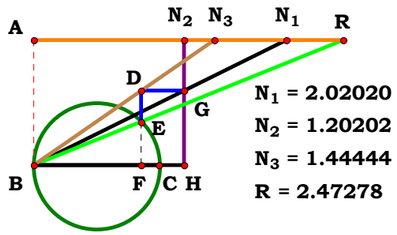


Unit. $AB := 1$ Given. $N_1 := 2.02020$ $N_2 := 1.20202$ $N_3 := 1.44444$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A}\cdot N_u}{\sqrt{N_u\cdot(B\cdot C - A\cdot N_u)}} = 2.472757$$

$$Num := \frac{\sqrt{A}\cdot N_u}{\sqrt{(\sqrt{A}\cdot N_u)^2}}$$

$$Den := \frac{\sqrt{N_u\cdot(B\cdot C - A\cdot N_u)}}{\sqrt{\left[\sqrt{N_u\cdot(B\cdot C - A\cdot N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A}\cdot N_u}{\sqrt{A\cdot {N_u}^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0: $\frac{\sqrt{A} \cdot N_u}{\sqrt{A \cdot N_u^2}}$

0, 2, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 2, 0: $\frac{\sqrt{A} \cdot N_u}{\sqrt{A \cdot N_u^2}}$

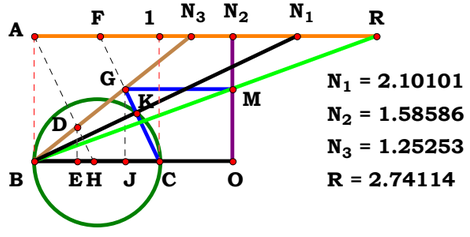
0, 0, 3: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 3: $\frac{\sqrt{A} \cdot N_u}{\sqrt{A \cdot N_u^2}}$

0, 2, 3: $\frac{N_u}{\sqrt{N_u^2}}$

1, 2, 3: $\frac{\sqrt{A} \cdot N_u}{\sqrt{A \cdot N_u^2}}$

3OBT7R2



Unit. $AB := 1$ Given. $N_1 := 2.10101$ $N_2 := 1.58586$ $N_3 := 1.25253$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u^2 + A \cdot C}{B \cdot C} = 2.741146$$

$$Num := \frac{N_u^2 + A \cdot C}{\sqrt{\left(N_u^2 + A \cdot C\right)^2}}$$

$$Den := \frac{B \cdot C}{\sqrt{(B \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2 \cdot C^2} \cdot \left(N_u^2 + A \cdot C\right)}{B \cdot C \cdot \sqrt{\left(N_u^2 + A \cdot C\right)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $\dfrac{N_u^{\,2}+1}{\sqrt{\left(N_u^{\,2}+1\right)^2}}$

1, 0, 0: $\dfrac{N_u^{\,2}+A}{\sqrt{\left(N_u^{\,2}+A\right)^2}}$

0, 2, 0: $\dfrac{\sqrt{B^2}\cdot\left(N_u^{\,2}+1\right)}{B\cdot\sqrt{\left(N_u^{\,2}+1\right)^2}}$

1, 2, 0: $\dfrac{\sqrt{B^2}\cdot\left(N_u^{\,2}+A\right)}{B\cdot\sqrt{\left(N_u^{\,2}+A\right)^2}}$

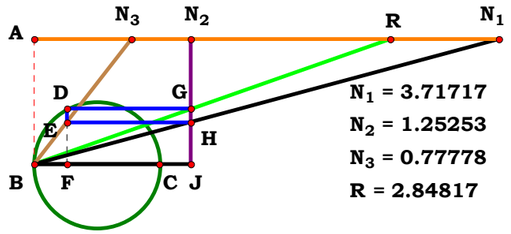
0, 0, 3: $\dfrac{\sqrt{C^2}\cdot\left(N_u^{\,2}+C\right)}{C\cdot\sqrt{\left(N_u^{\,2}+C\right)^2}}$

1, 0, 3: $\dfrac{\sqrt{C^2}\cdot\left(N_u^{\,2}+A\cdot C\right)}{C\cdot\sqrt{\left(N_u^{\,2}+A\cdot C\right)^2}}$

0, 2, 3: $\dfrac{\sqrt{B^2\cdot C^2}\cdot\left(N_u^{\,2}+C\right)}{B\cdot C\cdot\sqrt{\left(N_u^{\,2}+C\right)^2}}$

1, 2, 3: $\dfrac{\sqrt{B^2\cdot C^2}\cdot\left(N_u^{\,2}+A\cdot C\right)}{B\cdot C\cdot\sqrt{\left(N_u^{\,2}+A\cdot C\right)^2}}$

3OBT7R3



Unit. $AB := 1$ **Given.** $N_1 := 3.71717$ $N_2 := 1.25253$ $N_3 := .77778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C \cdot N_u}{\sqrt{A \cdot N_u \cdot (B \cdot C - A \cdot N_u)}} = 2.848177$$

$$Num := \frac{C \cdot N_u}{\sqrt{(C \cdot N_u)^2}}$$

$$Den := \frac{\sqrt{A \cdot N_u \cdot (B \cdot C - A \cdot N_u)}}{\sqrt{\left[\sqrt{A \cdot N_u \cdot (B \cdot C - A \cdot N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot N_u}{\sqrt{C^2 \cdot {N_u}^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 0, 0: $\frac{N_u}{\sqrt{N_u^2}}$

0, 2, 0: $\frac{N_u}{\sqrt{N_u^2}}$

1, 2, 0: $\frac{N_u}{\sqrt{N_u^2}}$

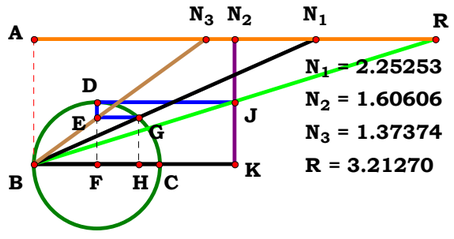
0, 0, 3: $\frac{C \cdot N_u}{\sqrt{C^2 \cdot N_u^2}}$

1, 0, 3: $\frac{C \cdot N_u}{\sqrt{C^2 \cdot N_u^2}}$

0, 2, 3: $\frac{C \cdot N_u}{\sqrt{C^2 \cdot N_u^2}}$

1, 2, 3: $\frac{C \cdot N_u}{\sqrt{C^2 \cdot N_u^2}}$

3OBT7R4



Unit. $AB := 1$ Given. $N_1 := 2.25253$ $N_2 := 1.60606$ $N_3 := 1.37374$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot\left(A^2+N_u{}^2\right)}{B\cdot\sqrt{A\cdot\left(C\cdot A^2-A\cdot N_u{}^2+C\cdot N_u{}^2\right)}} = 3.212695$$

$$Num := \frac{C\cdot\left(A^2+N_u{}^2\right)}{\sqrt{\left[C\cdot\left(A^2+N_u{}^2\right)\right]^2}}$$

$$Den := \frac{B\cdot\sqrt{A\cdot\left(C\cdot A^2-A\cdot N_u{}^2+C\cdot N_u{}^2\right)}}{\sqrt{\left[B\cdot\sqrt{A\cdot\left(C\cdot A^2-A\cdot N_u{}^2+C\cdot N_u{}^2\right)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C\cdot\left(A^2+N_u{}^2\right)\cdot\sqrt{A\cdot B^2\cdot\left(C\cdot A^2-A\cdot N_u{}^2+C\cdot N_u{}^2\right)}}{B\cdot\sqrt{C^2\cdot\left(A^2+N_u{}^2\right)^2}\cdot\sqrt{A\cdot\left(C\cdot A^2-A\cdot N_u{}^2+C\cdot N_u{}^2\right)}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u^2+1}{\sqrt{\left(N_u^2+1\right)^2}}$$

1, 0, 0: $$\frac{A^2+N_u^2}{\sqrt{\left(A^2+N_u^2\right)^2}}$$

0, 2, 0: $$\frac{\sqrt{B^2}\cdot\left(N_u^2+1\right)}{B\cdot\sqrt{\left(N_u^2+1\right)^2}}$$

1, 2, 0: $$\frac{\left(A^2+N_u^2\right)\cdot\sqrt{A\cdot B^2\cdot\left(A^2-A\cdot N_u^2+N_u^2\right)}}{B\cdot\sqrt{A\cdot\left(A^2-A\cdot N_u^2+N_u^2\right)}\cdot\sqrt{\left(A^2+N_u^2\right)^2}}$$

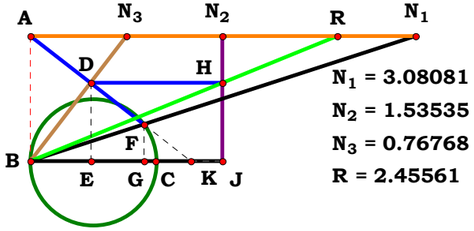
0, 0, 3: $$\frac{C\cdot\left(N_u^2+1\right)}{\sqrt{C^2\cdot\left(N_u^2+1\right)^2}}$$

1, 0, 3: $$\frac{C\cdot\left(A^2+N_u^2\right)}{\sqrt{C^2\cdot\left(A^2+N_u^2\right)^2}}$$

0, 2, 3: $$\frac{C\cdot\sqrt{B^2\cdot\left(C-N_u^2+C\cdot N_u^2\right)}\cdot\left(N_u^2+1\right)}{B\cdot\sqrt{C^2\cdot\left(N_u^2+1\right)^2}\cdot\sqrt{C-N_u^2+C\cdot N_u^2}}$$

1, 2, 3: $$\frac{C\cdot\left(A^2+N_u^2\right)\cdot\sqrt{A\cdot B^2\cdot\left(C\cdot A^2-A\cdot N_u^2+C\cdot N_u^2\right)}}{B\cdot\sqrt{C^2\cdot\left(A^2+N_u^2\right)^2}\cdot\sqrt{A\cdot\left(C\cdot A^2-A\cdot N_u^2+C\cdot N_u^2\right)}}$$

3OBT7R5



Unit. $AB := 1$ **Given.** $N_1 := 3.08081$ $N_2 := 1.53535$ $N_3 := .76768$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A^2 - A \cdot N_u + N_u^2 + C \cdot N_u}{B \cdot C} = 2.455609$$

$$Num := \frac{A^2 - A \cdot N_u + N_u^2 + C \cdot N_u}{\sqrt{\left(A^2 - A \cdot N_u + N_u^2 + C \cdot N_u\right)^2}}$$

$$Den := \frac{B \cdot C}{\sqrt{(B \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2 \cdot C^2} \cdot \left(A^2 - A \cdot N_u + N_u^2 + C \cdot N_u\right)}{B \cdot C \cdot \sqrt{\left(A^2 - A \cdot N_u + N_u^2 + C \cdot N_u\right)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u^2 + 1}{\sqrt{\left(N_u^2 + 1\right)^2}}$$

1, 0, 0:

$$\frac{A^2 - A \cdot N_u + N_u^2 + N_u}{\sqrt{\left(A^2 - A \cdot N_u + N_u^2 + N_u\right)^2}}$$

0, 2, 0:

$$\frac{\sqrt{B^2} \cdot \left(N_u^2 + 1\right)}{B \cdot \sqrt{\left(N_u^2 + 1\right)^2}}$$

1, 2, 0:

$$\frac{\sqrt{B^2} \cdot \left(A^2 - A \cdot N_u + N_u^2 + N_u\right)}{B \cdot \sqrt{\left(A^2 - A \cdot N_u + N_u^2 + N_u\right)^2}}$$

0, 0, 3:

$$\frac{\sqrt{C^2} \cdot \left(N_u^2 - N_u + C \cdot N_u + 1\right)}{C \cdot \sqrt{\left(N_u^2 - N_u + C \cdot N_u + 1\right)^2}}$$

1, 0, 3:

$$\frac{\sqrt{C^2} \cdot \left(A^2 - A \cdot N_u + N_u^2 + C \cdot N_u\right)}{C \cdot \sqrt{\left(A^2 - A \cdot N_u + N_u^2 + C \cdot N_u\right)^2}}$$

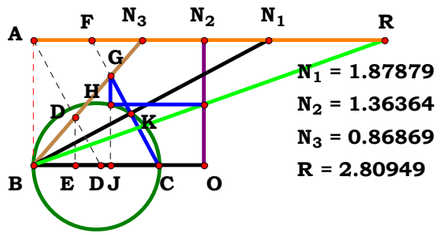
0, 2, 3:

$$\frac{\sqrt{B^2 \cdot C^2} \cdot \left(N_u^2 - N_u + C \cdot N_u + 1\right)}{B \cdot C \cdot \sqrt{\left(N_u^2 - N_u + C \cdot N_u + 1\right)^2}}$$

1, 2, 3:

$$\frac{\sqrt{B^2 \cdot C^2} \cdot \left(A^2 - A \cdot N_u + N_u^2 + C \cdot N_u\right)}{B \cdot C \cdot \sqrt{\left(A^2 - A \cdot N_u + N_u^2 + C \cdot N_u\right)^2}}$$

3OBT7R6



Unit. $AB := 1$ **Given.** $N_1 := 1.87879$ $N_2 := 1.36364$ $N_3 := .86869$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A \cdot C} \cdot \left(N_u{}^2 + A \cdot C\right)}{A \cdot B \cdot C} = 2.809495$$

$$Num := \frac{\sqrt{A \cdot C} \cdot \left(N_u{}^2 + A \cdot C\right)}{\sqrt{\left[\sqrt{A \cdot C} \cdot \left(N_u{}^2 + A \cdot C\right)\right]^2}}$$

$$Den := \frac{A \cdot B \cdot C}{\sqrt{(A \cdot B \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A \cdot C} \cdot \left(N_u{}^2 + A \cdot C\right) \cdot \sqrt{A^2 \cdot B^2 \cdot C^2}}{A \cdot B \cdot C \cdot \sqrt{A \cdot C \cdot \left(N_u{}^2 + A \cdot C\right)^2}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u^2 + 1}{\sqrt{\left(N_u^2 + 1\right)^2}}$$

1, 0, 0: $$\frac{\sqrt{A^2}\cdot\left(N_u^2 + A\right)}{\sqrt{A}\cdot\sqrt{A\cdot\left(N_u^2 + A\right)^2}}$$

0, 2, 0: $$\frac{\sqrt{B^2}\cdot\left(N_u^2 + 1\right)}{B\cdot\sqrt{\left(N_u^2 + 1\right)^2}}$$

1, 2, 0: $$\frac{\sqrt{A^2\cdot B^2}\cdot\left(N_u^2 + A\right)}{\sqrt{A}\cdot B\cdot\sqrt{A\cdot\left(N_u^2 + A\right)^2}}$$

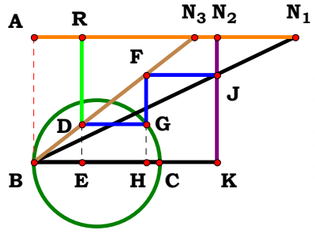
0, 0, 3: $$\frac{\sqrt{C^2}\cdot\left(N_u^2 + C\right)}{\sqrt{C}\cdot\sqrt{C\cdot\left(N_u^2 + C\right)^2}}$$

1, 0, 3: $$\frac{\sqrt{A^2\cdot C^2}\cdot\sqrt{A\cdot C}\cdot\left(N_u^2 + A\cdot C\right)}{A\cdot C\cdot\sqrt{A\cdot C\cdot\left(N_u^2 + A\cdot C\right)^2}}$$

0, 2, 3: $$\frac{\sqrt{B^2\cdot C^2}\cdot\left(N_u^2 + C\right)}{B\cdot\sqrt{C}\cdot\sqrt{C\cdot\left(N_u^2 + C\right)^2}}$$

1, 2, 3: $$\frac{\sqrt{A\cdot C}\cdot\left(N_u^2 + A\cdot C\right)\cdot\sqrt{A^2\cdot B^2\cdot C^2}}{A\cdot B\cdot C\cdot\sqrt{A\cdot C\cdot\left(N_u^2 + A\cdot C\right)^2}}$$

3OBT7R7



$N_1 = 2.09091$
$N_2 = 1.46465$
$N_3 = 1.28283$
$R = 0.38723$

Unit. $AB := 1$ **Given.** $N_1 := 2.09091$ $N_2 := 1.46465$ $N_3 := 1.28283$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \sqrt{A \cdot N_u \cdot (B \cdot C - A \cdot N_u)}}{B \cdot C^2} = 0.387228$$

$$Num := \frac{N_u \cdot \sqrt{A \cdot N_u \cdot (B \cdot C - A \cdot N_u)}}{\sqrt{\left[N_u \cdot \sqrt{A \cdot N_u \cdot (B \cdot C - A \cdot N_u)}\right]^2}}$$

$$Den := \frac{B \cdot C^2}{\sqrt{(B \cdot C^2)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot C^4} \cdot \sqrt{A \cdot N_u \cdot (B \cdot C - A \cdot N_u)}}{B \cdot C^2 \cdot \sqrt{A \cdot N_u^3 \cdot (B \cdot C - A \cdot N_u)}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0: $$\frac{N_u \cdot \sqrt{-N_u \cdot (N_u - 1)}}{\sqrt{-N_u^{\,3} \cdot (N_u - 1)}}$$

1, 0, 0: $$\frac{N_u \cdot \sqrt{-A \cdot N_u \cdot (A \cdot N_u - 1)}}{\sqrt{-A \cdot N_u^{\,3} \cdot (A \cdot N_u - 1)}}$$

0, 2, 0: $$\frac{N_u \cdot \sqrt{B^2} \cdot \sqrt{N_u \cdot (B - N_u)}}{B \cdot \sqrt{N_u^{\,3} \cdot (B - N_u)}}$$

1, 2, 0: $$\frac{N_u \cdot \sqrt{B^2} \cdot \sqrt{A \cdot N_u \cdot (B - A \cdot N_u)}}{B \cdot \sqrt{A \cdot N_u^{\,3} \cdot (B - A \cdot N_u)}}$$

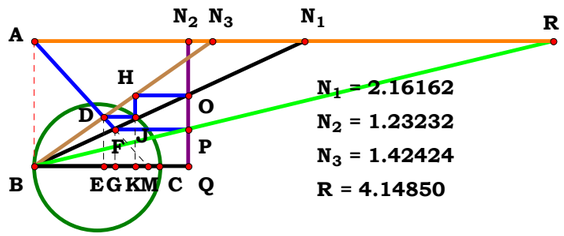
0, 0, 3: $$\frac{N_u \cdot \sqrt{C^4} \cdot \sqrt{N_u \cdot (C - N_u)}}{C^2 \cdot \sqrt{N_u^{\,3} \cdot (C - N_u)}}$$

1, 0, 3: $$\frac{N_u \cdot \sqrt{C^4} \cdot \sqrt{A \cdot N_u \cdot (C - A \cdot N_u)}}{C^2 \cdot \sqrt{A \cdot N_u^{\,3} \cdot (C - A \cdot N_u)}}$$

0, 2, 3: $$\frac{N_u \cdot \sqrt{B^2 \cdot C^4} \cdot \sqrt{-N_u \cdot (N_u - B \cdot C)}}{B \cdot C^2 \cdot \sqrt{-N_u^{\,3} \cdot (N_u - B \cdot C)}}$$

1, 2, 3: $$\frac{N_u \cdot \sqrt{B^2 \cdot C^4} \cdot \sqrt{A \cdot N_u \cdot (B \cdot C - A \cdot N_u)}}{B \cdot C^2 \cdot \sqrt{A \cdot N_u^{\,3} \cdot (B \cdot C - A \cdot N_u)}}$$

3OBT7R8



Unit. $AB := 1$ **Given.** $N_1 := 2.16162$ $N_2 := 1.23232$ $N_3 := 1.42424$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left[\sqrt{A \cdot B \cdot C \cdot N_u - A^2 \cdot N_u^2} \cdot (A - C) + B \cdot C^2\right]}{A \cdot B \cdot \sqrt{A \cdot \left(B \cdot C \cdot N_u - A \cdot N_u^2\right)}} = 4.148451$$

$$Num := \frac{N_u \cdot \left[\sqrt{A \cdot B \cdot C \cdot N_u - A^2 \cdot N_u^2} \cdot (A - C) + B \cdot C^2\right]}{\sqrt{\left[N_u \cdot \left[\sqrt{A \cdot B \cdot C \cdot N_u - A^2 \cdot N_u^2} \cdot (A - C) + B \cdot C^2\right]\right]^2}}$$

$$Den := \frac{A \cdot B \cdot \sqrt{A \cdot \left(B \cdot C \cdot N_u - A \cdot N_u^2\right)}}{\sqrt{\left[A \cdot B \cdot \sqrt{A \cdot \left(B \cdot C \cdot N_u - A \cdot N_u^2\right)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(A \cdot \sqrt{A \cdot B \cdot C \cdot N_u - A^2 \cdot N_u^2} - C \cdot \sqrt{A \cdot B \cdot C \cdot N_u - A^2 \cdot N_u^2} + B \cdot C^2\right) \cdot \sqrt{-A^3 \cdot B^2 \cdot \left(A \cdot N_u^2 - B \cdot C \cdot N_u\right)}}{A \cdot B \cdot \sqrt{N_u^2 \cdot \left[\sqrt{A \cdot B \cdot C \cdot N_u - A^2 \cdot N_u^2} \cdot (A - C) + B \cdot C^2\right]^2} \cdot \sqrt{-A \cdot \left(A \cdot N_u^2 - B \cdot C \cdot N_u\right)}} = 0$$

For 3 variables there are 8 subsets.

0, 0, 0:

$$\frac{N_u}{\sqrt{N_u^{\,2}}}$$

1, 0, 0:

$$\frac{N_u\cdot\sqrt{A^3\cdot\left(N_u-A\cdot N_u^{\,2}\right)}\cdot\left(A\cdot\sqrt{A\cdot N_u-A^2\cdot N_u^{\,2}}-\sqrt{A\cdot N_u-A^2\cdot N_u^{\,2}}+1\right)}{A\cdot\sqrt{A\cdot\left(N_u-A\cdot N_u^{\,2}\right)}\cdot\sqrt{N_u^{\,2}\cdot\left[(A-1)\cdot\sqrt{A\cdot N_u-A^2\cdot N_u^{\,2}}+1\right]^2}}$$

0, 2, 0:

$$\frac{N_u\cdot\sqrt{-B^2\cdot\left(N_u^{\,2}-B\cdot N_u\right)}}{\sqrt{B^2\cdot N_u^{\,2}}\cdot\sqrt{B\cdot N_u-N_u^{\,2}}}$$

1, 2, 0:

$$\frac{N_u\cdot\sqrt{A^3\cdot B^2\cdot\left(B\cdot N_u-A\cdot N_u^{\,2}\right)}\cdot\left(B+A\cdot\sqrt{A\cdot B\cdot N_u-A^2\cdot N_u^{\,2}}-\sqrt{A\cdot B\cdot N_u-A^2\cdot N_u^{\,2}}\right)}{A\cdot B\cdot\sqrt{A\cdot\left(B\cdot N_u-A\cdot N_u^{\,2}\right)}\cdot\sqrt{N_u^{\,2}\cdot\left[B+\sqrt{A\cdot B\cdot N_u-A^2\cdot N_u^{\,2}}\cdot(A-1)\right]^2}}$$

0, 0, 3:

$$\frac{N_u\cdot\left(C^2-C\cdot\sqrt{C\cdot N_u-N_u^{\,2}}+\sqrt{C\cdot N_u-N_u^{\,2}}\right)}{\sqrt{N_u^{\,2}\cdot\left[C^2-(C-1)\cdot\sqrt{C\cdot N_u-N_u^{\,2}}\right]^2}}$$

1, 0, 3:

$$\frac{N_u\cdot\sqrt{A^3\cdot\left(C\cdot N_u-A\cdot N_u^{\,2}\right)}\cdot\left(C^2+A\cdot\sqrt{A\cdot C\cdot N_u-A^2\cdot N_u^{\,2}}-C\cdot\sqrt{A\cdot C\cdot N_u-A^2\cdot N_u^{\,2}}\right)}{A\cdot\sqrt{A\cdot\left(C\cdot N_u-A\cdot N_u^{\,2}\right)}\cdot\sqrt{N_u^{\,2}\cdot\left[C^2+\sqrt{A\cdot C\cdot N_u-A^2\cdot N_u^{\,2}}\cdot(A-C)\right]^2}}$$

0, 2, 3:

$$\frac{N_u\cdot\sqrt{-B^2\cdot\left(N_u^{\,2}-B\cdot C\cdot N_u\right)}\cdot\left(\sqrt{B\cdot C\cdot N_u-N_u^{\,2}}-C\cdot\sqrt{B\cdot C\cdot N_u-N_u^{\,2}}+B\cdot C^2\right)}{B\cdot\sqrt{N_u^{\,2}\cdot\left[(C-1)\cdot\sqrt{B\cdot C\cdot N_u-N_u^{\,2}}-B\cdot C^2\right]^2}\cdot\sqrt{B\cdot C\cdot N_u-N_u^{\,2}}}$$

1, 2, 3:

$$\frac{N_u\cdot\left(A\cdot\sqrt{A\cdot B\cdot C\cdot N_u-A^2\cdot N_u^{\,2}}-C\cdot\sqrt{A\cdot B\cdot C\cdot N_u-A^2\cdot N_u^{\,2}}+B\cdot C^2\right)\cdot\sqrt{-A^3\cdot B^2\cdot\left(A\cdot N_u^{\,2}-B\cdot C\cdot N_u\right)}}{A\cdot B\cdot\sqrt{N_u^{\,2}\cdot\left[\sqrt{A\cdot B\cdot C\cdot N_u-A^2\cdot N_u^{\,2}}\cdot(A-C)+B\cdot C^2\right]^2}\cdot\sqrt{-A\cdot\left(A\cdot N_u^{\,2}-B\cdot C\cdot N_u\right)}}$$

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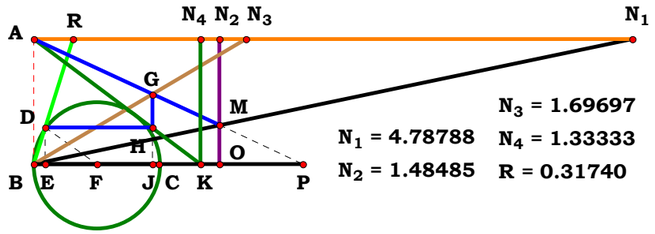

Unit. $AB := 1$ **Given.** $N_1 := 4.78788$ $N_2 := 1.48485$ $N_3 := 1.69697$

$N_4 := 1.33333$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A-B-C+\sqrt{(B-A+C-2\cdot D)\cdot(3\cdot A-3\cdot B-3\cdot C+2\cdot D)}}{2\cdot(A-B-C+D)} = 0.317401$$

$$Num := \frac{A-B-C+\sqrt{(B-A+C-2\cdot D)\cdot(3\cdot A-3\cdot B-3\cdot C+2\cdot D)}}{\sqrt{\left[A-B-C+\sqrt{(B-A+C-2\cdot D)\cdot(3\cdot A-3\cdot B-3\cdot C+2\cdot D)}\right]^2}}$$

$$Den := \frac{2\cdot(A-B-C+D)}{\sqrt{[2\cdot(A-B-C+D)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{\sqrt{(2\cdot A-2\cdot B-2\cdot C+2\cdot D)^2}\cdot\left[A-B-C+\sqrt{-(A-B-C+2\cdot D)\cdot(3\cdot A-3\cdot B-3\cdot C+2\cdot D)}\right]}{2\cdot\sqrt{\left[A-B-C+\sqrt{-(A-B-C+2\cdot D)\cdot(3\cdot A-3\cdot B-3\cdot C+2\cdot D)}\right]^2}\cdot(A-B-C+D)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0:
$$\frac{\sqrt{(2\cdot A-2)^2}\cdot\left[A+\sqrt{-A\cdot(3\cdot A-4)}-2\right]}{2\cdot(A-1)\cdot\sqrt{\left[A+\sqrt{-A\cdot(3\cdot A-4)}-2\right]^2}}$$

0, 2, 0, 0:
$$\frac{\sqrt{(2\cdot B-2)^2}\cdot\left[B-\sqrt{-(B-2)\cdot(3\cdot B-2)}\right]}{2\cdot(B-1)\cdot\sqrt{\left[B-\sqrt{-(B-2)\cdot(3\cdot B-2)}\right]^2}}$$

1, 2, 0, 0:
$$\frac{\sqrt{(2\cdot A-2\cdot B)^2}\cdot\left[A-B+\sqrt{(3\cdot B-3\cdot A+1)\cdot(A-B+1)}-1\right]}{2\cdot\sqrt{\left[A-B+\sqrt{(3\cdot B-3\cdot A+1)\cdot(A-B+1)}-1\right]^2}\cdot(A-B)}$$

0, 0, 3, 0:
$$\frac{\sqrt{(2\cdot C-2)^2}\cdot\left[C-\sqrt{-(C-2)\cdot(3\cdot C-2)}\right]}{2\cdot(C-1)\cdot\sqrt{\left[C-\sqrt{-(C-2)\cdot(3\cdot C-2)}\right]^2}}$$

1, 0, 3, 0:
$$\frac{\sqrt{(2\cdot A-2\cdot C)^2}\cdot\left[A-C+\sqrt{(3\cdot C-3\cdot A+1)\cdot(A-C+1)}-1\right]}{2\cdot\sqrt{\left[A-C+\sqrt{(3\cdot C-3\cdot A+1)\cdot(A-C+1)}-1\right]^2}\cdot(A-C)}$$

0, 2, 3, 0:
$$\frac{\sqrt{(2\cdot B+2\cdot C-4)^2}\cdot\left[B+C-\sqrt{-(3\cdot B+3\cdot C-5)\cdot(B+C-3)}-1\right]}{2\cdot\sqrt{\left[B+C-\sqrt{-(3\cdot B+3\cdot C-5)\cdot(B+C-3)}-1\right]^2}\cdot(B+C-2)}$$

1, 2, 3, 0:
$$\frac{\sqrt{(2\cdot A-2\cdot B-2\cdot C+2)^2}\cdot\left[A-B-C+\sqrt{-(3\cdot A-3\cdot B-3\cdot C+2)\cdot(A-B-C+2)}\right]}{2\cdot\sqrt{\left[A-B-C+\sqrt{-(3\cdot A-3\cdot B-3\cdot C+2)\cdot(A-B-C+2)}\right]^2}\cdot(A-B-C+1)}$$

0, 0, 0, 4: $$\frac{\sqrt{(2\cdot D-2)^2}\cdot\left[\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}-1\right]}{2\cdot(D-1)\cdot\sqrt{\left[\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}-1\right]^2}}$$

1, 0, 0, 4: $$\frac{\sqrt{(2\cdot A+2\cdot D-4)^2}\cdot\left[A+\sqrt{-(3\cdot A+2\cdot D-6)\cdot(A+2\cdot D-2)}-2\right]}{2\cdot\sqrt{\left[A+\sqrt{-(3\cdot A+2\cdot D-6)\cdot(A+2\cdot D-2)}-2\right]^2}\cdot(A+D-2)}$$

0, 2, 0, 4: $$\frac{\left[B-\sqrt{-(3\cdot B-2\cdot D)\cdot(B-2\cdot D)}\right]\cdot\sqrt{(2\cdot B-2\cdot D)^2}}{2\cdot\sqrt{\left[B-\sqrt{-(3\cdot B-2\cdot D)\cdot(B-2\cdot D)}\right]^2}\cdot(B-D)}$$

1, 2, 0, 4: $$\frac{\sqrt{(2\cdot A-2\cdot B+2\cdot D-2)^2}\cdot\left[A-B+\sqrt{-(3\cdot A-3\cdot B+2\cdot D-3)\cdot(A-B+2\cdot D-1)}-1\right]}{2\cdot\sqrt{\left[A-B+\sqrt{-(3\cdot A-3\cdot B+2\cdot D-3)\cdot(A-B+2\cdot D-1)}-1\right]^2}\cdot(A-B+D-1)}$$

0, 0, 3, 4: $$\frac{\left[C-\sqrt{-(3\cdot C-2\cdot D)\cdot(C-2\cdot D)}\right]\cdot\sqrt{(2\cdot C-2\cdot D)^2}}{2\cdot\sqrt{\left[C-\sqrt{-(3\cdot C-2\cdot D)\cdot(C-2\cdot D)}\right]^2}\cdot(C-D)}$$

1, 0, 3, 4: $$\frac{\sqrt{(2\cdot A-2\cdot C+2\cdot D-2)^2}\cdot\left[A-C+\sqrt{-(3\cdot A-3\cdot C+2\cdot D-3)\cdot(A-C+2\cdot D-1)}-1\right]}{2\cdot\sqrt{\left[A-C+\sqrt{-(3\cdot A-3\cdot C+2\cdot D-3)\cdot(A-C+2\cdot D-1)}-1\right]^2}\cdot(A-C+D-1)}$$

0, 2, 3, 4: $$\frac{\sqrt{(2\cdot B+2\cdot C-2\cdot D-2)^2}\cdot\left[B+C-\sqrt{-(3\cdot B+3\cdot C-2\cdot D-3)\cdot(B+C-2\cdot D-1)}-1\right]}{2\cdot\sqrt{\left[B+C-\sqrt{-(3\cdot B+3\cdot C-2\cdot D-3)\cdot(B+C-2\cdot D-1)}-1\right]^2}\cdot(B+C-D-1)}$$

1, 2, 3, 4: $$\frac{\sqrt{(2\cdot A-2\cdot B-2\cdot C+2\cdot D)^2}\cdot\left[A-B-C+\sqrt{-(A-B-C+2\cdot D)\cdot(3\cdot A-3\cdot B-3\cdot C+2\cdot D)}\right]}{2\cdot\sqrt{\left[A-B-C+\sqrt{-(A-B-C+2\cdot D)\cdot(3\cdot A-3\cdot B-3\cdot C+2\cdot D)}\right]^2}\cdot(A-B-C+D)}$$

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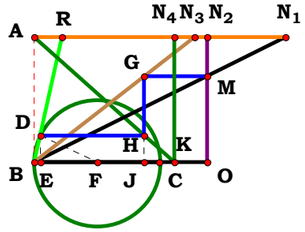

$N_1 = 2.01010$
$N_2 = 1.38384$
$N_3 = 1.28283$
$N_4 = 1.12121$
$R = 0.22287$

Unit. $AB := 1$ **Given.** $N_1 := 2.01010$ $N_2 := 1.38384$ $N_3 := 1.28283$

$N_4 := 1.12121$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B \cdot C - \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)}}{2 \cdot (B \cdot C - A \cdot D)} = 0.222865$$

$$Num := \frac{B \cdot C - \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)}}{\sqrt{\left[B \cdot C - \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)}\right]^2}} \qquad Den := \frac{2 \cdot (B \cdot C - A \cdot D)}{\sqrt{[2 \cdot (B \cdot C - A \cdot D)]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{[2 \cdot (B \cdot C - A \cdot D)]^2} \cdot \left[B \cdot C - \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)}\right]}{2 \cdot (B \cdot C - A \cdot D) \cdot \sqrt{\left[B \cdot C - \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)}\right]^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0: $$\frac{\sqrt{(2\cdot A-2)^2}\cdot\left[\sqrt{-(2\cdot A-1)\cdot(2\cdot A-3)}-1\right]}{\sqrt{\left[\sqrt{-(2\cdot A-1)\cdot(2\cdot A-3)}-1\right]^2}\cdot(2\cdot A-2)}$$

0, 2, 0, 0: $$\frac{\sqrt{(2\cdot B-2)^2}\cdot\left[B-\sqrt{-(B-2)\cdot(3\cdot B-2)}\right]}{(2\cdot B-2)\cdot\sqrt{\left[B-\sqrt{-(B-2)\cdot(3\cdot B-2)}\right]^2}}$$

1, 2, 0, 0: $$-\frac{\left[B-\sqrt{(2\cdot A-3\cdot B)\cdot(B-2\cdot A)}\right]\cdot\sqrt{(2\cdot A-2\cdot B)^2}}{\sqrt{\left[B-\sqrt{(2\cdot A-3\cdot B)\cdot(B-2\cdot A)}\right]^2}\cdot(2\cdot A-2\cdot B)}$$

0, 0, 3, 0: $$\frac{\sqrt{(2\cdot C-2)^2}\cdot\left[C-\sqrt{-(C-2)\cdot(3\cdot C-2)}\right]}{(2\cdot C-2)\cdot\sqrt{\left[C-\sqrt{-(C-2)\cdot(3\cdot C-2)}\right]^2}}$$

1, 0, 3, 0: $$-\frac{\left[C-\sqrt{(2\cdot A-3\cdot C)\cdot(C-2\cdot A)}\right]\cdot\sqrt{(2\cdot A-2\cdot C)^2}}{\sqrt{\left[C-\sqrt{(2\cdot A-3\cdot C)\cdot(C-2\cdot A)}\right]^2}\cdot(2\cdot A-2\cdot C)}$$

0, 2, 3, 0: $$-\frac{\sqrt{(2\cdot B\cdot C-2)^2}\cdot\left[\sqrt{-(B\cdot C-2)\cdot(3\cdot B\cdot C-2)}-B\cdot C\right]}{\sqrt{\left[\sqrt{-(B\cdot C-2)\cdot(3\cdot B\cdot C-2)}-B\cdot C\right]^2}\cdot(2\cdot B\cdot C-2)}$$

1, 2, 3, 0: $$-\frac{\sqrt{(2\cdot A-2\cdot B\cdot C)^2}\cdot\left[B\cdot C-\sqrt{-(2\cdot A-B\cdot C)\cdot(2\cdot A-3\cdot B\cdot C)}\right]}{(2\cdot A-2\cdot B\cdot C)\cdot\sqrt{\left[B\cdot C-\sqrt{-(2\cdot A-B\cdot C)\cdot(2\cdot A-3\cdot B\cdot C)}\right]^2}}$$

0, 0, 0, 4: $$\frac{\sqrt{(2\cdot D-2)^2}\cdot\left[\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}-1\right]}{\sqrt{\left[\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}-1\right]^2}\cdot(2\cdot D-2)}$$

1, 0, 0, 4: $$\frac{\sqrt{(2\cdot A\cdot D-2)^2}\cdot\left[\sqrt{-(2\cdot A\cdot D-1)\cdot(2\cdot A\cdot D-3)}-1\right]}{\sqrt{\left[\sqrt{-(2\cdot A\cdot D-1)\cdot(2\cdot A\cdot D-3)}-1\right]^2}\cdot(2\cdot A\cdot D-2)}$$

0, 2, 0, 4: $$\frac{\left[B-\sqrt{-(3\cdot B-2\cdot D)\cdot(B-2\cdot D)}\right]\cdot\sqrt{(2\cdot B-2\cdot D)^2}}{\sqrt{\left[B-\sqrt{-(3\cdot B-2\cdot D)\cdot(B-2\cdot D)}\right]^2}\cdot(2\cdot B-2\cdot D)}$$

1, 2, 0, 4: $$\frac{\sqrt{(2\cdot B-2\cdot A\cdot D)^2}\cdot\left[B-\sqrt{-(B-2\cdot A\cdot D)\cdot(3\cdot B-2\cdot A\cdot D)}\right]}{(2\cdot B-2\cdot A\cdot D)\cdot\sqrt{\left[B-\sqrt{-(B-2\cdot A\cdot D)\cdot(3\cdot B-2\cdot A\cdot D)}\right]^2}}$$

0, 0, 3, 4: $$\frac{\left[C-\sqrt{-(3\cdot C-2\cdot D)\cdot(C-2\cdot D)}\right]\cdot\sqrt{(2\cdot C-2\cdot D)^2}}{\sqrt{\left[C-\sqrt{-(3\cdot C-2\cdot D)\cdot(C-2\cdot D)}\right]^2}\cdot(2\cdot C-2\cdot D)}$$

1, 0, 3, 4: $$\frac{\sqrt{(2\cdot C-2\cdot A\cdot D)^2}\cdot\left[C-\sqrt{-(C-2\cdot A\cdot D)\cdot(3\cdot C-2\cdot A\cdot D)}\right]}{(2\cdot C-2\cdot A\cdot D)\cdot\sqrt{\left[C-\sqrt{-(C-2\cdot A\cdot D)\cdot(3\cdot C-2\cdot A\cdot D)}\right]^2}}$$

0, 2, 3, 4: $$-\frac{\sqrt{(2\cdot D-2\cdot B\cdot C)^2}\cdot\left[B\cdot C-\sqrt{-(2\cdot D-B\cdot C)\cdot(2\cdot D-3\cdot B\cdot C)}\right]}{(2\cdot D-2\cdot B\cdot C)\cdot\sqrt{\left[B\cdot C-\sqrt{-(2\cdot D-B\cdot C)\cdot(2\cdot D-3\cdot B\cdot C)}\right]^2}}$$

1, 2, 3, 4: $$\frac{\sqrt{[2\cdot(B\cdot C-A\cdot D)]^2}\cdot\left[B\cdot C-\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}\right]}{2\cdot(B\cdot C-A\cdot D)\cdot\sqrt{\left[B\cdot C-\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}\right]^2}}$$

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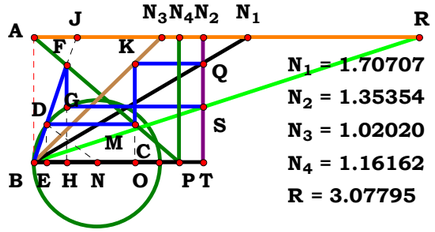


Unit. $AB := 1$ Given. $N_1 := 1.70707$ $N_2 := 1.35354$ $N_3 := 1.02020$

$N_4 := 1.16162$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{2}\cdot N_u^{\,2}\cdot\left[B\cdot C\cdot D - D\cdot\sqrt{8\cdot A\cdot B\cdot C\cdot D - 4\cdot A^2\cdot D^2 - 3\cdot B^2\cdot C^2} - 2\cdot N_u\cdot(A\cdot D - B\cdot C)\right]}{2\cdot B\cdot\sqrt{2\cdot A\cdot D^2\cdot N_u^{\,3}\cdot(2\cdot B\cdot C + A\cdot N_u) - D\cdot N_u^{\,3}\cdot\left[B^2\cdot C^2 + \sqrt{(2\cdot A\cdot D - 3\cdot B\cdot C)\cdot(B\cdot C - 2\cdot A\cdot D)}\cdot(B\cdot C - A\cdot N_u) + 5\cdot A\cdot B\cdot C\cdot N_u\right] - 2\cdot N_u^{\,3}\cdot\left(A^2\cdot D^3 - B^2\cdot C^2\cdot N_u\right)}} = 3.077953$$

$$Num := \frac{\sqrt{2}\cdot N_u^{\,2}\cdot\left[B\cdot C\cdot D - D\cdot\sqrt{8\cdot A\cdot B\cdot C\cdot D - 4\cdot A^2\cdot D^2 - 3\cdot B^2\cdot C^2} - 2\cdot N_u\cdot(A\cdot D - B\cdot C)\right]}{\sqrt{\left[\sqrt{2}\cdot N_u^{\,2}\cdot\left[B\cdot C\cdot D - D\cdot\sqrt{8\cdot A\cdot B\cdot C\cdot D - 4\cdot A^2\cdot D^2 - 3\cdot B^2\cdot C^2} - 2\cdot N_u\cdot(A\cdot D - B\cdot C)\right]\right]^2}}$$

$$Den := \frac{2\cdot B\cdot\sqrt{2\cdot A\cdot D^2\cdot N_u^{\,3}\cdot(2\cdot B\cdot C + A\cdot N_u) - D\cdot N_u^{\,3}\cdot\left[B^2\cdot C^2 + \sqrt{(2\cdot A\cdot D - 3\cdot B\cdot C)\cdot(B\cdot C - 2\cdot A\cdot D)}\cdot(B\cdot C - A\cdot N_u) + 5\cdot A\cdot B\cdot C\cdot N_u\right] - 2\cdot N_u^{\,3}\cdot\left(A^2\cdot D^3 - B^2\cdot C^2\cdot N_u\right)}}{\sqrt{\left[2\cdot B\cdot\sqrt{2\cdot A\cdot D^2\cdot N_u^{\,3}\cdot(2\cdot B\cdot C + A\cdot N_u) - D\cdot N_u^{\,3}\cdot\left[B^2\cdot C^2 + \sqrt{(2\cdot A\cdot D - 3\cdot B\cdot C)\cdot(B\cdot C - 2\cdot A\cdot D)}\cdot(B\cdot C - A\cdot N_u) + 5\cdot A\cdot B\cdot C\cdot N_u\right] - 2\cdot N_u^{\,3}\cdot\left(A^2\cdot D^3 - B^2\cdot C^2\cdot N_u\right)\right]^2}}$$

$L := \frac{Num}{Den}$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^{\,2}\cdot\sqrt{-B^2\cdot\left[\begin{array}{l}2\cdot N_u^{\,3}\cdot\left(A^2\cdot D^3 - B^2\cdot C^2\cdot N_u\right) \ \ldots\\ +\ D\cdot N_u^{\,3}\cdot\left[B^2\cdot C^2 + \sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)}\cdot(B\cdot C - A\cdot N_u) + 5\cdot A\cdot B\cdot C\cdot N_u\right] \ \ldots\\ +\ -2\cdot A\cdot D^2\cdot N_u^{\,3}\cdot(2\cdot B\cdot C + A\cdot N_u)\end{array}\right]}\cdot\left(B\cdot C\cdot D - D\cdot\sqrt{8\cdot A\cdot B\cdot C\cdot D - 4\cdot A^2\cdot D^2 - 3\cdot B^2\cdot C^2} - 2\cdot A\cdot D\cdot N_u + 2\cdot B\cdot C\cdot N_u\right)}{B\cdot\sqrt{N_u^{\,4}\cdot\left[\begin{array}{l}D\cdot\sqrt{8\cdot A\cdot B\cdot C\cdot D - 4\cdot A^2\cdot D^2 - 3\cdot B^2\cdot C^2} \ \ldots\\ +\ 2\cdot N_u\cdot(A\cdot D - B\cdot C) - B\cdot C\cdot D\end{array}\right]^2}\cdot\sqrt{\begin{array}{l}2\cdot A\cdot D^2\cdot N_u^{\,3}\cdot(2\cdot B\cdot C + A\cdot N_u) \ \ldots\\ +\ -D\cdot N_u^{\,3}\cdot\left[B^2\cdot C^2 + \sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)}\cdot(B\cdot C - A\cdot N_u) + 5\cdot A\cdot B\cdot C\cdot N_u\right] \ \ldots\\ +\ -2\cdot N_u^{\,3}\cdot\left(A^2\cdot D^3 - B^2\cdot C^2\cdot N_u\right)\end{array}}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0:
$$\frac{N_u^{\,2}\cdot\left(2\cdot N_u-\sqrt{-4\cdot A^2+8\cdot A-3}-2\cdot A\cdot N_u+1\right)}{\sqrt{N_u^{\,4}\cdot\left(2\cdot N_u-\sqrt{-4\cdot A^2+8\cdot A-3}-2\cdot A\cdot N_u+1\right)^2}}$$

0, 2, 0, 0:
$$\frac{N_u^{\,2}\cdot\sqrt{B^2\cdot\left[2\cdot N_u^{\,3}\cdot\left(2\cdot B+N_u\right)-N_u^{\,3}\cdot\left[\sqrt{-(B-2)\cdot(3\cdot B-2)}\cdot\left(B-N_u\right)+B^2+5\cdot B\cdot N_u\right]+2\cdot N_u^{\,3}\cdot\left(B^2\cdot N_u-1\right)\right]}\cdot\left(B-2\cdot N_u-\sqrt{-3\cdot B^2+8\cdot B-4}+2\cdot B\cdot N_u\right)}{B\cdot\sqrt{N_u^{\,4}\cdot\left(B-2\cdot N_u-\sqrt{-3\cdot B^2+8\cdot B-4}+2\cdot B\cdot N_u\right)^2}\cdot\sqrt{2\cdot N_u^{\,3}\cdot\left(2\cdot B+N_u\right)-N_u^{\,3}\cdot\left[\sqrt{-(B-2)\cdot(3\cdot B-2)}\cdot\left(B-N_u\right)+B^2+5\cdot B\cdot N_u\right]+2\cdot N_u^{\,3}\cdot\left(B^2\cdot N_u-1\right)}}$$

1, 2, 0, 0:
$$\frac{N_u^{\,2}\cdot\sqrt{-B^2\cdot\left[2\cdot N_u^{\,3}\cdot\left(A^2-B^2\cdot N_u\right)+N_u^{\,3}\cdot\left[B^2+\sqrt{(2\cdot A-3\cdot B)\cdot(B-2\cdot A)}\cdot\left(B-A\cdot N_u\right)+5\cdot A\cdot B\cdot N_u\right]-2\cdot A\cdot N_u^{\,3}\cdot\left(2\cdot B+A\cdot N_u\right)\right]}\cdot\left(B-2\cdot A\cdot N_u+2\cdot B\cdot N_u-\sqrt{-4\cdot A^2+8\cdot A\cdot B-3\cdot B^2}\right)}{B\cdot\sqrt{N_u^{\,4}\cdot\left(B-2\cdot A\cdot N_u+2\cdot B\cdot N_u-\sqrt{-4\cdot A^2+8\cdot A\cdot B-3\cdot B^2}\right)^2}\cdot\sqrt{2\cdot A\cdot N_u^{\,3}\cdot\left(2\cdot B+A\cdot N_u\right)-N_u^{\,3}\cdot\left[B^2+\sqrt{(2\cdot A-3\cdot B)\cdot(B-2\cdot A)}\cdot\left(B-A\cdot N_u\right)+5\cdot A\cdot B\cdot N_u\right]-2\cdot N_u^{\,3}\cdot\left(A^2-B^2\cdot N_u\right)}}$$

0, 0, 3, 0:
$$\frac{N_u^{\,2}\cdot\left(C-2\cdot N_u-\sqrt{-3\cdot C^2+8\cdot C-4}+2\cdot C\cdot N_u\right)}{\sqrt{N_u^{\,4}\cdot\left(C-2\cdot N_u-\sqrt{-3\cdot C^2+8\cdot C-4}+2\cdot C\cdot N_u\right)^2}}$$

1, 0, 3, 0:
$$\frac{N_u^{\,2}\cdot\left(C-2\cdot A\cdot N_u+2\cdot C\cdot N_u-\sqrt{-4\cdot A^2+8\cdot A\cdot C-3\cdot C^2}\right)}{\sqrt{N_u^{\,4}\cdot\left(C-2\cdot A\cdot N_u+2\cdot C\cdot N_u-\sqrt{-4\cdot A^2+8\cdot A\cdot C-3\cdot C^2}\right)^2}}$$

0, 2, 3, 0:
$$-\frac{N_u^{\,2}\cdot\sqrt{B^2\cdot\left[\begin{array}{l}2\cdot N_u^{\,3}\cdot\left(B^2\cdot C^2\cdot N_u-1\right)\ \ldots\\ +\ -N_u^{\,3}\cdot\left[B^2\cdot C^2-\left(N_u-B\cdot C\right)\cdot\sqrt{-(B\cdot C-2)\cdot(3\cdot B\cdot C-2)}+5\cdot B\cdot C\cdot N_u\right]+2\cdot N_u^{\,3}\cdot\left(N_u+2\cdot B\cdot C\right)\end{array}\right]}\cdot\left(2\cdot N_u+\sqrt{8\cdot B\cdot C-3\cdot B^2\cdot C^2-4}-B\cdot C-2\cdot B\cdot C\cdot N_u\right)}{B\cdot\sqrt{N_u^{\,4}\cdot\left(2\cdot N_u+\sqrt{8\cdot B\cdot C-3\cdot B^2\cdot C^2-4}-B\cdot C-2\cdot B\cdot C\cdot N_u\right)^2}\cdot\sqrt{\begin{array}{l}2\cdot N_u^{\,3}\cdot\left(B^2\cdot C^2\cdot N_u-1\right)\ \ldots\\ +\ -N_u^{\,3}\cdot\left[B^2\cdot C^2-\left(N_u-B\cdot C\right)\cdot\sqrt{-(B\cdot C-2)\cdot(3\cdot B\cdot C-2)}+5\cdot B\cdot C\cdot N_u\right]+2\cdot N_u^{\,3}\cdot\left(N_u+2\cdot B\cdot C\right)\end{array}}}$$

1, 2, 3, 0:
$$\frac{N_u^{\,2}\cdot\sqrt{-B^2\cdot\left[\begin{array}{l}2\cdot N_u^{\,3}\cdot\left(A^2-B^2\cdot C^2\cdot N_u\right)\ \ldots\\ +\ N_u^{\,3}\cdot\left[B^2\cdot C^2+\sqrt{-(2\cdot A-B\cdot C)\cdot(2\cdot A-3\cdot B\cdot C)}\cdot\left(B\cdot C-A\cdot N_u\right)+5\cdot A\cdot B\cdot C\cdot N_u\right]-2\cdot A\cdot N_u^{\,3}\cdot\left(2\cdot B\cdot C+A\cdot N_u\right)\end{array}\right]}\cdot\left(\begin{array}{l}B\cdot C-2\cdot A\cdot N_u\ \ldots\\ +\ -\sqrt{-4\cdot A^2+8\cdot A\cdot B\cdot C-3\cdot B^2\cdot C^2}+2\cdot B\cdot C\cdot N_u\end{array}\right)}{B\cdot\sqrt{N_u^{\,4}\cdot\left(\begin{array}{l}B\cdot C-2\cdot A\cdot N_u\ \ldots\\ +\ -\sqrt{-4\cdot A^2+8\cdot A\cdot B\cdot C-3\cdot B^2\cdot C^2}+2\cdot B\cdot C\cdot N_u\end{array}\right)^2}\cdot\sqrt{\begin{array}{l}2\cdot A\cdot N_u^{\,3}\cdot\left(2\cdot B\cdot C+A\cdot N_u\right)\ \ldots\\ +\ -N_u^{\,3}\cdot\left[B^2\cdot C^2+\sqrt{-(2\cdot A-B\cdot C)\cdot(2\cdot A-3\cdot B\cdot C)}\cdot\left(B\cdot C-A\cdot N_u\right)+5\cdot A\cdot B\cdot C\cdot N_u\right]-2\cdot N_u^{\,3}\cdot\left(A^2-B^2\cdot C^2\cdot N_u\right)\end{array}}}$$

0, 0, 0, 4:

$$\frac{N_u^{\,2}\cdot\left(D+2\cdot N_u-2\cdot D\cdot N_u-D\cdot\sqrt{8\cdot D-4\cdot D^2-3}\right)}{\sqrt{N_u^{\,4}\cdot\left(D+2\cdot N_u-2\cdot D\cdot N_u-D\cdot\sqrt{8\cdot D-4\cdot D^2-3}\right)^2}}$$

1, 0, 0, 4:

$$\frac{N_u^{\,2}\cdot\left(D+2\cdot N_u-D\cdot\sqrt{8\cdot A\cdot D-4\cdot A^2\cdot D^2-3}-2\cdot A\cdot D\cdot N_u\right)}{\sqrt{N_u^{\,4}\cdot\left(D+2\cdot N_u-D\cdot\sqrt{8\cdot A\cdot D-4\cdot A^2\cdot D^2-3}-2\cdot A\cdot D\cdot N_u\right)^2}}$$

0, 2, 0, 4:

$$-\frac{N_u^{\,2}\cdot\sqrt{-B^2\cdot\left[\begin{array}{l}2\cdot N_u^{\,3}\cdot\left(D^3-B^2\cdot N_u\right)\ \ldots\\ +\ D\cdot N_u^{\,3}\cdot\left[B^2+5\cdot B\cdot N_u+\sqrt{-(3\cdot B-2\cdot D)\cdot(B-2\cdot D)}\cdot\left(B-N_u\right)\right]-2\cdot D^2\cdot N_u^{\,3}\cdot\left(2\cdot B+N_u\right)\end{array}\right]}\cdot\left(D\cdot\sqrt{8\cdot B\cdot D-3\cdot B^2-4\cdot D^2}-B\cdot D-2\cdot B\cdot N_u+2\cdot D\cdot N_u\right)}{B\cdot\sqrt{N_u^{\,4}\cdot\left(D\cdot\sqrt{8\cdot B\cdot D-3\cdot B^2-4\cdot D^2}-B\cdot D-2\cdot B\cdot N_u+2\cdot D\cdot N_u\right)^2}\cdot\sqrt{\begin{array}{l}2\cdot D^2\cdot N_u^{\,3}\cdot\left(2\cdot B+N_u\right)\ \ldots\\ +\ -D\cdot N_u^{\,3}\cdot\left[B^2+5\cdot B\cdot N_u+\sqrt{-(3\cdot B-2\cdot D)\cdot(B-2\cdot D)}\cdot\left(B-N_u\right)\right]-2\cdot N_u^{\,3}\cdot\left(D^3-B^2\cdot N_u\right)\end{array}}}$$

1, 2, 0, 4:

$$-\frac{N_u^{\,2}\cdot\sqrt{-B^2\cdot\left[\begin{array}{l}2\cdot N_u^{\,3}\cdot\left(A^2\cdot D^3-B^2\cdot N_u\right)\ \ldots\\ +\ D\cdot N_u^{\,3}\cdot\left[B^2+\left(B-A\cdot N_u\right)\cdot\sqrt{-(B-2\cdot A\cdot D)\cdot(3\cdot B-2\cdot A\cdot D)}+5\cdot A\cdot B\cdot N_u\right]-2\cdot A\cdot D^2\cdot N_{\pi}^{\,3}\cdot\left(2\cdot B+A\cdot N_{\pi}\right)\end{array}\right]}\cdot\left(\begin{array}{l}D\cdot\sqrt{8\cdot A\cdot B\cdot D-4\cdot A^2\cdot D^2-3\cdot B^2}\ \ldots\\ +\ -B\cdot D-2\cdot B\cdot N_u+2\cdot A\cdot D\cdot N_u\end{array}\right)}{B\cdot\sqrt{N_u^{\,4}\cdot\left(\begin{array}{l}D\cdot\sqrt{8\cdot A\cdot B\cdot D-4\cdot A^2\cdot D^2-3\cdot B^2}\ \ldots\\ +\ -B\cdot D-2\cdot B\cdot N_u+2\cdot A\cdot D\cdot N_u\end{array}\right)^2}\cdot\sqrt{\begin{array}{l}2\cdot A\cdot D^2\cdot N_u^{\,3}\cdot\left(2\cdot B+A\cdot N_u\right)\ \ldots\\ +\ -D\cdot N_u^{\,3}\cdot\left[B^2+\left(B-A\cdot N_u\right)\cdot\sqrt{-}\right.\end{array}}}$$

1, 0, 3, 4:

$$-\frac{N_u^{\,2}\cdot\left(D\cdot\sqrt{8\cdot A\cdot C\cdot D-4\cdot A^2\cdot D^2-3\cdot C^2}-C\cdot D-2\cdot C\cdot N_u+2\cdot A\cdot D\cdot N_u\right)}{\sqrt{N_u^{\,4}\cdot\left(D\cdot\sqrt{8\cdot A\cdot C\cdot D-4\cdot A^2\cdot D^2-3\cdot C^2}-C\cdot D-2\cdot C\cdot N_u+2\cdot A\cdot D\cdot N_u\right)^2}}$$

0, 0, 3, 4:

$$-\frac{N_u^{\,2}\cdot\left(D\cdot\sqrt{8\cdot C\cdot D-3\cdot C^2-4\cdot D^2}-C\cdot D-2\cdot C\cdot N_u+2\cdot D\cdot N_u\right)}{\sqrt{N_u^{\,4}\cdot\left(D\cdot\sqrt{8\cdot C\cdot D-3\cdot C^2-4\cdot D^2}-C\cdot D-2\cdot C\cdot N_u+2\cdot D\cdot N_u\right)^2}}$$

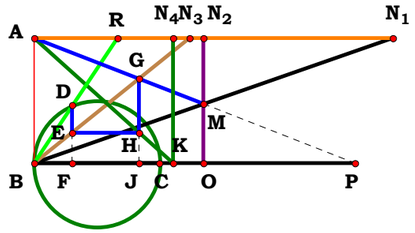
0, 2, 3, 4:

$$-\frac{N_u^2\cdot\sqrt{-B^2\cdot\left[\begin{array}{l}2\cdot N_u^3\cdot\left(D^3-B^2\cdot C^2\cdot N_u\right)\ \ldots\\ +\ -2\cdot D^2\cdot N_u^3\cdot\left(N_u+2\cdot B\cdot C\right)+D\cdot N_u^3\cdot\left[B^2\cdot C^2-\sqrt{-(2\cdot D-B\cdot C)\cdot(2\cdot D-3\cdot B\cdot C)}\cdot\left(N_u-B\cdot C\right)+5\cdot B\cdot C\cdot N_u\right]\end{array}\right]}\cdot\left(\begin{array}{l}D\cdot\sqrt{8\cdot B\cdot C\cdot D-3\cdot B^2\cdot C^2-4\cdot D^2}\ \ldots\\ +\ 2\cdot D\cdot N_u-B\cdot C\cdot D-2\cdot B\cdot C\cdot N_u\end{array}\right)}{B\cdot\sqrt{N_u^4\cdot\left(\begin{array}{l}D\cdot\sqrt{8\cdot B\cdot C\cdot D-3\cdot B^2\cdot C^2-4\cdot D^2}\ \ldots\\ +\ 2\cdot D\cdot N_u-B\cdot C\cdot D-2\cdot B\cdot C\cdot N_u\end{array}\right)^2}\cdot\sqrt{\begin{array}{l}2\cdot D^2\cdot N_u^3\cdot\left(N_u+2\cdot B\cdot C\right)-2\cdot N_u^3\cdot\left(D^3-B^2\cdot C^2\cdot N_u\right)\ \ldots\\ +\ -D\cdot N_u^3\cdot\left[B^2\cdot C^2-\sqrt{-(2\cdot D-B\cdot C)\cdot(2\cdot D-3\cdot B\cdot C)}\cdot\left(N_u-B\cdot C\right)+5\cdot B\cdot C\cdot N_u\right]\end{array}}}$$

1, 2, 3, 4:

$$\frac{N_u^2\cdot\sqrt{-B^2\cdot\left[\begin{array}{l}2\cdot N_u^3\cdot\left(A^2\cdot D^3-B^2\cdot C^2\cdot N_u\right)\ \ldots\\ +\ D\cdot N_u^3\cdot\left[B^2\cdot C^2+\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}\cdot\left(B\cdot C-A\cdot N_u\right)+5\cdot A\cdot B\cdot C\cdot N_u\right]\ \ldots\\ +\ -2\cdot A\cdot D^2\cdot N_u^3\cdot\left(2\cdot B\cdot C+A\cdot N_u\right)\end{array}\right]}\cdot\left(\begin{array}{l}B\cdot C\cdot D-D\cdot\sqrt{8\cdot A\cdot B\cdot C\cdot D-4\cdot A^2\cdot D^2-3\cdot B^2\cdot C^2}\ \ldots\\ +\ -2\cdot A\cdot D\cdot N_u+2\cdot B\cdot C\cdot N_u\end{array}\right)}{B\cdot\sqrt{N_u^4\cdot\left[D\cdot\sqrt{8\cdot A\cdot B\cdot C\cdot D-4\cdot A^2\cdot D^2-3\cdot B^2\cdot C^2}\ \ldots\right]^2}\cdot\sqrt{\begin{array}{l}2\cdot A\cdot D^2\cdot N_u^3\cdot\left(2\cdot B\cdot C+A\cdot N_u\right)\ \ldots\\ +\ -D\cdot N_u^3\cdot\left[B^2\cdot C^2+\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}\cdot\left(B\cdot C-A\cdot N_u\right)+5\cdot A\cdot B\cdot C\cdot N_u\right]\ \ldots\\ +\ -2\cdot N_u^3\cdot\left(A^2\cdot D^3-B^2\cdot C^2\cdot N_u\right)\end{array}}}$$

3OBT8R3



$N_1 = 2.86869$
$N_2 = 1.35354$
$N_3 = 1.24242$
$N_4 = 1.11111$
$R = 0.66524$

Unit. $AB := 1$ **Given.** $N_1 := 2.86869$ $N_2 := 1.35354$ $N_3 := 1.24242$

$N_4 := 1.11111$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (B - A + C - D)}{\sqrt{N_u \cdot (B - A + C - D) \cdot \left[N_u \cdot (A - B - C + D) + C \cdot (B - A + C)\right]}} = 0.665236$$

$$Num := \frac{N_u \cdot (B - A + C - D)}{\sqrt{\left[N_u \cdot (B - A + C - D)\right]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot (B - A + C - D) \cdot \left[N_u \cdot (A - B - C + D) + C \cdot (B - A + C)\right]}}{\sqrt{\left[\sqrt{N_u \cdot (B - A + C - D) \cdot \left[N_u \cdot (A - B - C + D) + C \cdot (B - A + C)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot (B - A + C - D)}{\sqrt{N_u^{\,2} \cdot (A - B - C + D)^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

0, 0, 0, 4: $-\frac{N_u \cdot (D-1)}{\sqrt{N_u^{\,2} \cdot (D-1)^2}}$

1, 0, 0, 0: $-\frac{N_u \cdot (A-1)}{\sqrt{N_u^{\,2} \cdot (A-1)^2}}$

1, 0, 0, 4: $-\frac{N_u \cdot (A+D-2)}{\sqrt{N_u^{\,2} \cdot (A+D-2)^2}}$

0, 2, 0, 0: $\frac{N_u \cdot (B-1)}{\sqrt{N_u^{\,2} \cdot (B-1)^2}}$

0, 2, 0, 4: $\frac{N_u \cdot (B-D)}{\sqrt{N_u^{\,2} \cdot (B-D)^2}}$

1, 2, 0, 0: $-\frac{N_u \cdot (A-B)}{\sqrt{N_u^{\,2} \cdot (A-B)^2}}$

1, 2, 0, 4: $-\frac{N_u \cdot (A-B+D-1)}{\sqrt{N_u^{\,2} \cdot (A-B+D-1)^2}}$

0, 0, 3, 0: $\frac{N_u \cdot (C-1)}{\sqrt{N_u^{\,2} \cdot (C-1)^2}}$

0, 0, 3, 4: $\frac{N_u \cdot (C-D)}{\sqrt{N_u^{\,2} \cdot (C-D)^2}}$

1, 0, 3, 0: $-\frac{N_u \cdot (A-C)}{\sqrt{N_u^{\,2} \cdot (A-C)^2}}$

1, 0, 3, 4: $-\frac{N_u \cdot (A-C+D-1)}{\sqrt{N_u^{\,2} \cdot (A-C+D-1)^2}}$

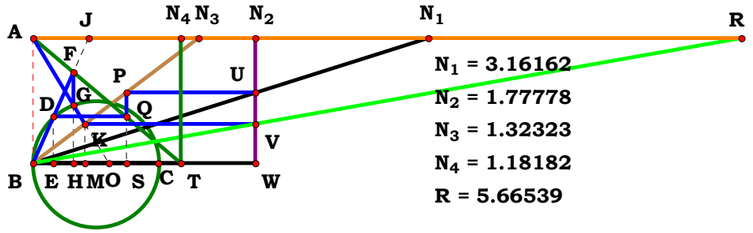
0, 2, 3, 0: $\frac{N_u \cdot (B+C-2)}{\sqrt{N_u^{\,2} \cdot (B+C-2)^2}}$

0, 2, 3, 4: $\frac{N_u \cdot (B+C-D-1)}{\sqrt{N_u^{\,2} \cdot (B+C-D-1)^2}}$

1, 2, 3, 0: $\frac{N_u \cdot (B-A+C-1)}{\sqrt{N_u^{\,2} \cdot (A-B-C+1)^2}}$

1, 2, 3, 4: $\frac{N_u \cdot (B-A+C-D)}{\sqrt{N_u^{\,2} \cdot (A-B-C+D)^2}}$

3OBT8R4



Unit. $AB := 1$ **Given.** $N_1 := 3.16162$ $N_2 := 1.77778$ $N_3 := 1.32323$ $N_4 := 1.18182$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{2}\cdot\sqrt{D\cdot N_u^4\cdot(A\cdot N_u - B\cdot C)\cdot\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)} + C^2\cdot B^2\cdot N_u^4\cdot(2\cdot N_u - D) + C\cdot A\cdot B\cdot D\cdot N_u^4\cdot(4\cdot D - 5\cdot N_u) + 2\cdot A^2\cdot D^2\cdot N_u^4\cdot(N_u - D)} \ \ldots}{+\left(\sqrt{N_u}\right)^3\cdot\left[\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)}\cdot(C + D) - B\cdot C^2 - B\cdot C\cdot D + 2\cdot A\cdot D\cdot N_u - 2\cdot B\cdot C\cdot N_u\right]}{B\cdot C\cdot\sqrt{N_u}\cdot\left[\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)} - B\cdot C\right]} = 5.665355$$

$$\text{Num} := \frac{\sqrt{2}\cdot\sqrt{D\cdot N_u^4\cdot(A\cdot N_u - B\cdot C)\cdot\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)} + C^2\cdot B^2\cdot N_u^4\cdot(2\cdot N_u - D) + C\cdot A\cdot B\cdot D\cdot N_u^4\cdot(4\cdot D - 5\cdot N_u) + 2\cdot A^2\cdot D^2\cdot N_u^4\cdot(N_u - D)} \ \ldots}{+\left(\sqrt{N_u}\right)^3\cdot\left[\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)}\cdot(C + D) - B\cdot C^2 - B\cdot C\cdot D + 2\cdot A\cdot D\cdot N_u - 2\cdot B\cdot C\cdot N_u\right]}$$

$$\sqrt{\left[\begin{array}{l}\sqrt{2}\cdot\sqrt{D\cdot N_u^4\cdot(A\cdot N_u - B\cdot C)\cdot\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)} + C^2\cdot B^2\cdot N_u^4\cdot(2\cdot N_u - D) + C\cdot A\cdot B\cdot D\cdot N_u^4\cdot(4\cdot D - 5\cdot N_u) + 2\cdot A^2\cdot D^2\cdot N_u^4\cdot(N_u - D)} \ \ldots \\ +\left(\sqrt{N_u}\right)^3\cdot\left[\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)}\cdot(C + D) - B\cdot C^2 - B\cdot C\cdot D + 2\cdot A\cdot D\cdot N_u - 2\cdot B\cdot C\cdot N_u\right]\end{array}\right]^2}$$

$$\text{Den} := \frac{B\cdot C\cdot\sqrt{N_u}\cdot\left[\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)} - B\cdot C\right]}{\sqrt{\left[B\cdot C\cdot\sqrt{N_u}\cdot\left[\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)} - B\cdot C\right]\right]^2}} \qquad L := \frac{\text{Num}}{\text{Den}}$$

Definitions.

$\text{Num} = -1$ $\text{Den} = -1$ $L = 1$

This covers two monitors when laid out, so maybe some other time.

$$\frac{\left[\begin{array}{l}\sqrt{2}\cdot\sqrt{\begin{array}{l}A\cdot B\cdot C\cdot D\cdot N_u{}^4\cdot\left(4\cdot D-5\cdot N_u\right)-B^2\cdot C^2\cdot N_u{}^4\cdot\left(D-2\cdot N_u\right)\ \ldots\\ \quad+\ -D\cdot N_u{}^4\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}\cdot\left(B\cdot C-A\cdot N_u\right)-2\cdot A^2\cdot D^2\cdot N_u{}^4\cdot\left(D-N_u\right)\end{array}}\ \ldots\\ +\ 2\cdot A\cdot D\cdot N_u{}^{\frac{5}{2}}-2\cdot B\cdot C\cdot N_u{}^{\frac{5}{2}}+C\cdot N_u{}^{\frac{3}{2}}\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}\ \ldots\\ +\ D\cdot N_u{}^{\frac{3}{2}}\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C^2\cdot N_u{}^{\frac{3}{2}}-B\cdot C\cdot D\cdot N_u{}^{\frac{3}{2}}\end{array}\right]\cdot\sqrt{B^2\cdot C^2\cdot N_u\cdot\left[\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C\right]^2}}{B\cdot C\cdot\sqrt{N_u}\cdot\left[\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C\right]\cdot\sqrt{\left[\begin{array}{l}\sqrt{2}\cdot\sqrt{\begin{array}{l}A\cdot B\cdot C\cdot D\cdot N_u{}^4\cdot\left(4\cdot D-5\cdot N_u\right)-B^2\cdot C^2\cdot N_u{}^4\cdot\left(D-2\cdot N_u\right)\ \ldots\\ \quad+\ -D\cdot N_u{}^4\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}\cdot\left(B\cdot C-A\cdot N_u\right)-2\cdot A^2\cdot D^2\cdot N_u{}^4\cdot\left(D-N_u\right)\end{array}}\ \ldots\\ +\ -N_u{}^{\frac{3}{2}}\cdot\left[B\cdot C^2-(C+D)\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}+B\cdot C\cdot D-2\cdot A\cdot D\cdot N_u+2\cdot B\cdot C\cdot N_u\right]\end{array}\right]^2}}=1$$

$$L-\frac{\left[\begin{array}{l}\sqrt{2}\cdot\sqrt{\begin{array}{l}A\cdot B\cdot C\cdot D\cdot N_u{}^4\cdot\left(4\cdot D-5\cdot N_u\right)-B^2\cdot C^2\cdot N_u{}^4\cdot\left(D-2\cdot N_u\right)\ \ldots\\ \quad+\ -D\cdot N_u{}^4\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}\cdot\left(B\cdot C-A\cdot N_u\right)-2\cdot A^2\cdot D^2\cdot N_u{}^4\cdot\left(D-N_u\right)\end{array}}\ \ldots\\ +\ 2\cdot A\cdot D\cdot N_u{}^{\frac{5}{2}}-2\cdot B\cdot C\cdot N_u{}^{\frac{5}{2}}+C\cdot N_u{}^{\frac{3}{2}}\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}\ \ldots\\ +\ D\cdot N_u{}^{\frac{3}{2}}\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C^2\cdot N_u{}^{\frac{3}{2}}-B\cdot C\cdot D\cdot N_u{}^{\frac{3}{2}}\end{array}\right]\cdot\sqrt{B^2\cdot C^2\cdot N_u\cdot\left[\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C\right]^2}}{B\cdot C\cdot\sqrt{N_u}\cdot\left[\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C\right]\cdot\sqrt{\left[\begin{array}{l}\sqrt{2}\cdot\sqrt{\begin{array}{l}A\cdot B\cdot C\cdot D\cdot N_u{}^4\cdot\left(4\cdot D-5\cdot N_u\right)-B^2\cdot C^2\cdot N_u{}^4\cdot\left(D-2\cdot N_u\right)\ \ldots\\ \quad+\ -D\cdot N_u{}^4\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}\cdot\left(B\cdot C-A\cdot N_u\right)-2\cdot A^2\cdot D^2\cdot N_u{}^4\cdot\left(D-N_u\right)\end{array}}\ \ldots\\ +\ -N_u{}^{\frac{3}{2}}\cdot\left[B\cdot C^2-(C+D)\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}+B\cdot C\cdot D-2\cdot A\cdot D\cdot N_u+2\cdot B\cdot C\cdot N_u\right]\end{array}\right]^2}}=0$$

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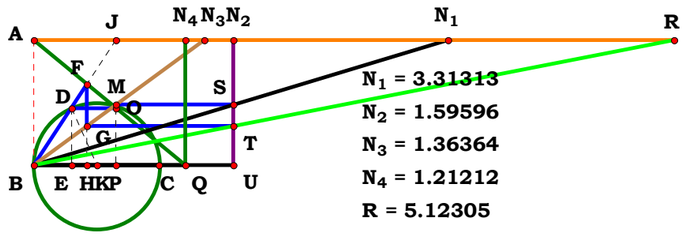

Unit. $AB := 1$ **Given.** $N_1 := 3.31313$ $N_2 := 1.59596$ $N_3 := 1.36364$ $N_4 := 1.21212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left[2 \cdot A \cdot D^2 - N_u \cdot \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)} - B \cdot C \cdot \left(2 \cdot D + N_u\right)\right]}{2 \cdot B \cdot C \cdot (A \cdot D - B \cdot C)} = 5.123112$$

$$Num := \frac{N_u \cdot \left[2 \cdot A \cdot D^2 - N_u \cdot \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)} - B \cdot C \cdot \left(2 \cdot D + N_u\right)\right]}{\sqrt{\left[N_u \cdot \left[2 \cdot A \cdot D^2 - N_u \cdot \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)} - B \cdot C \cdot \left(2 \cdot D + N_u\right)\right]\right]^2}}$$

$$Den := \frac{2 \cdot B \cdot C \cdot (A \cdot D - B \cdot C)}{\sqrt{[2 \cdot B \cdot C \cdot (A \cdot D - B \cdot C)]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u \cdot \left[2 \cdot A \cdot D^2 - N_u \cdot \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)} - 2 \cdot B \cdot C \cdot D - B \cdot C \cdot N_u\right] \cdot \sqrt{B^2 \cdot C^2 \cdot (A \cdot D - B \cdot C)^2}}{B \cdot C \cdot \sqrt{N_u^2 \cdot \left[N_u \cdot \sqrt{(B \cdot C - 2 \cdot A \cdot D) \cdot (2 \cdot A \cdot D - 3 \cdot B \cdot C)} - 2 \cdot A \cdot D^2 + B \cdot C \cdot \left(2 \cdot D + N_u\right)\right]^2} \cdot (A \cdot D - B \cdot C)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0:
$$-\frac{N_u\cdot\sqrt{(A-1)^2}\cdot\left[N_u-2\cdot A+N_u\cdot\sqrt{-(2\cdot A-1)\cdot(2\cdot A-3)}+2\right]}{(A-1)\cdot\sqrt{{N_u}^2\cdot\left[N_u-2\cdot A+N_u\cdot\sqrt{-(2\cdot A-1)\cdot(2\cdot A-3)}+2\right]^2}}$$

0, 2, 0, 0:
$$\frac{N_u\cdot\sqrt{B^2\cdot(B-1)^2}\cdot\left[2\cdot B+B\cdot N_u+N_u\cdot\sqrt{-(B-2)\cdot(3\cdot B-2)}-2\right]}{B\cdot(B-1)\cdot\sqrt{{N_u}^2\cdot\left[B\cdot\left(N_u+2\right)+N_u\cdot\sqrt{-(B-2)\cdot(3\cdot B-2)}-2\right]^2}}$$

1, 2, 0, 0:
$$-\frac{N_u\cdot\sqrt{B^2\cdot(A-B)^2}\cdot\left[2\cdot B-2\cdot A+N_u\cdot\sqrt{(2\cdot A-3\cdot B)\cdot(B-2\cdot A)}+B\cdot N_u\right]}{B\cdot\sqrt{{N_u}^2\cdot\left[N_u\cdot\sqrt{(2\cdot A-3\cdot B)\cdot(B-2\cdot A)}-2\cdot A+B\cdot\left(N_u+2\right)\right]^2}\cdot(A-B)}$$

0, 0, 3, 0:
$$\frac{N_u\cdot\sqrt{C^2\cdot(C-1)^2}\cdot\left[2\cdot C+N_u\cdot\sqrt{-(C-2)\cdot(3\cdot C-2)}+C\cdot N_u-2\right]}{C\cdot(C-1)\cdot\sqrt{{N_u}^2\cdot\left[N_u\cdot\sqrt{-(C-2)\cdot(3\cdot C-2)}+C\cdot\left(N_u+2\right)-2\right]^2}}$$

1, 0, 3, 0:
$$-\frac{N_u\cdot\sqrt{C^2\cdot(A-C)^2}\cdot\left[2\cdot C-2\cdot A+N_u\cdot\sqrt{(2\cdot A-3\cdot C)\cdot(C-2\cdot A)}+C\cdot N_u\right]}{C\cdot\sqrt{{N_u}^2\cdot\left[N_u\cdot\sqrt{(2\cdot A-3\cdot C)\cdot(C-2\cdot A)}-2\cdot A+C\cdot\left(N_u+2\right)\right]^2}\cdot(A-C)}$$

0, 2, 3, 0:
$$\frac{N_u\cdot\sqrt{B^2\cdot C^2\cdot(B\cdot C-1)^2}\cdot\left[2\cdot B\cdot C+N_u\cdot\sqrt{-(B\cdot C-2)\cdot(3\cdot B\cdot C-2)}+B\cdot C\cdot N_u-2\right]}{B\cdot C\cdot\sqrt{{N_u}^2\cdot\left[N_u\cdot\sqrt{-(B\cdot C-2)\cdot(3\cdot B\cdot C-2)}+B\cdot C\cdot\left(N_u+2\right)-2\right]^2}\cdot(B\cdot C-1)}$$

1, 2, 3, 0:
$$-\frac{N_u\cdot\sqrt{B^2\cdot C^2\cdot(A-B\cdot C)^2}\cdot\left[N_u\cdot\sqrt{-(2\cdot A-B\cdot C)\cdot(2\cdot A-3\cdot B\cdot C)}-2\cdot A+2\cdot B\cdot C+B\cdot C\cdot N_u\right]}{B\cdot C\cdot(A-B\cdot C)\cdot\sqrt{{N_u}^2\cdot\left[N_u\cdot\sqrt{-(2\cdot A-B\cdot C)\cdot(2\cdot A-3\cdot B\cdot C)}-2\cdot A+B\cdot C\cdot\left(N_u+2\right)\right]^2}}$$

0, 0, 0, 4:

$$-\frac{N_u\cdot\sqrt{(D-1)^2}\cdot\left[2\cdot D+N_u-2\cdot D^2+N_u\cdot\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}\right]}{(D-1)\cdot\sqrt{{N_u}^2\cdot\left[2\cdot D+N_u-2\cdot D^2+N_u\cdot\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}\right]^2}}$$

1, 0, 0, 4:

$$-\frac{N_u\cdot\sqrt{(A\cdot D-1)^2}\cdot\left[2\cdot D+N_u-2\cdot A\cdot D^2+N_u\cdot\sqrt{-(2\cdot A\cdot D-1)\cdot(2\cdot A\cdot D-3)}\right]}{\sqrt{{N_u}^2\cdot\left[2\cdot D+N_u-2\cdot A\cdot D^2+N_u\cdot\sqrt{-(2\cdot A\cdot D-1)\cdot(2\cdot A\cdot D-3)}\right]^2}\cdot(A\cdot D-1)}$$

0, 2, 0, 4:

$$\frac{N_u\cdot\sqrt{B^2\cdot(B-D)^2}\cdot\left[N_u\cdot\sqrt{-(3\cdot B-2\cdot D)\cdot(B-2\cdot D)}-2\cdot D^2+2\cdot B\cdot D+B\cdot N_u\right]}{B\cdot\sqrt{{N_u}^2\cdot\left[N_u\cdot\sqrt{-(3\cdot B-2\cdot D)\cdot(B-2\cdot D)}-2\cdot D^2+B\cdot\left(2\cdot D+N_u\right)\right]^2}\cdot(B-D)}$$

1, 2, 0, 4:

$$\frac{N_u\cdot\sqrt{B^2\cdot(B-A\cdot D)^2}\cdot\left[2\cdot B\cdot D+B\cdot N_u+N_u\cdot\sqrt{-(B-2\cdot A\cdot D)\cdot(3\cdot B-2\cdot A\cdot D)}-2\cdot A\cdot D^2\right]}{B\cdot(B-A\cdot D)\cdot\sqrt{{N_u}^2\cdot\left[B\cdot\left(2\cdot D+N_u\right)+N_u\cdot\sqrt{-(B-2\cdot A\cdot D)\cdot(3\cdot B-2\cdot A\cdot D)}-2\cdot A\cdot D^2\right]^2}}$$

0, 0, 3, 4:

$$\frac{N_u\cdot\sqrt{C^2\cdot(C-D)^2}\cdot\left[N_u\cdot\sqrt{-(3\cdot C-2\cdot D)\cdot(C-2\cdot D)}-2\cdot D^2+2\cdot C\cdot D+C\cdot N_u\right]}{C\cdot\sqrt{{N_u}^2\cdot\left[N_u\cdot\sqrt{-(3\cdot C-2\cdot D)\cdot(C-2\cdot D)}-2\cdot D^2+C\cdot\left(2\cdot D+N_u\right)\right]^2}\cdot(C-D)}$$

1, 0, 3, 4:

$$\frac{N_u\cdot\sqrt{C^2\cdot(C-A\cdot D)^2}\cdot\left[2\cdot C\cdot D+C\cdot N_u+N_u\cdot\sqrt{-(C-2\cdot A\cdot D)\cdot(3\cdot C-2\cdot A\cdot D)}-2\cdot A\cdot D^2\right]}{C\cdot(C-A\cdot D)\cdot\sqrt{{N_u}^2\cdot\left[C\cdot\left(2\cdot D+N_u\right)+N_u\cdot\sqrt{-(C-2\cdot A\cdot D)\cdot(3\cdot C-2\cdot A\cdot D)}-2\cdot A\cdot D^2\right]^2}}$$

0, 2, 3, 4:

$$-\frac{N_{.u}\cdot\sqrt{B^2\cdot C^2\cdot(D-B\cdot C)^2}\cdot\left[N_{.u}\cdot\sqrt{-(2\cdot D-B\cdot C)\cdot(2\cdot D-3\cdot B\cdot C)}-2\cdot D^2+2\cdot B\cdot C\cdot D+B\cdot C\cdot N_{.u}\right]}{B\cdot C\cdot\sqrt{{N_{.u}}^2\cdot\left[N_{.u}\cdot\sqrt{-(2\cdot D-B\cdot C)\cdot(2\cdot D-3\cdot B\cdot C)}-2\cdot D^2+B\cdot C\cdot\left(2\cdot D+N_{.u}\right)\right]^2}\cdot(D-B\cdot C)}$$

1, 2, 3, 4:

$$\frac{N_u\cdot\left[2\cdot A\cdot D^2-N_u\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-2\cdot B\cdot C\cdot D-B\cdot C\cdot N_u\right]\cdot\sqrt{B^2\cdot C^2\cdot(A\cdot D-B\cdot C)^2}}{B\cdot C\cdot\sqrt{{N_u}^2\cdot\left[N_u\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-2\cdot A\cdot D^2+B\cdot C\cdot\left(2\cdot D+N_u\right)\right]^2}\cdot(A\cdot D-B\cdot C)}$$

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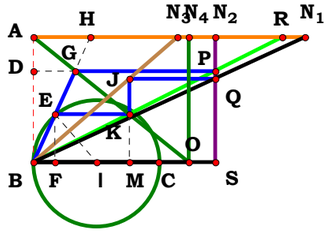

$N_1 = 2.17172$
$N_2 = 1.45455$
$N_3 = 1.15152$
$N_4 = 1.24242$
$R = 1.99216$

Unit. $AB := 1$ **Given.** $N_1 := 2.17172$ $N_2 := 1.45455$ $N_3 := 1.15152$

$N_4 := 1.24242$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{D\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C\cdot D+2\cdot N_u\cdot(A\cdot D-B\cdot C)}{2\cdot B\cdot(A\cdot D-B\cdot C)}=1.992156$$

$$Num := \frac{D\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C\cdot D+2\cdot N_u\cdot(A\cdot D-B\cdot C)}{\sqrt{\left[D\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C\cdot D+2\cdot N_u\cdot(A\cdot D-B\cdot C)\right]^2}}$$

$$Den := \frac{2\cdot B\cdot(A\cdot D-B\cdot C)}{\sqrt{[2\cdot B\cdot(A\cdot D-B\cdot C)]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = -1$ $Den = -1$ $L = 1$

$$L-\frac{\sqrt{B^2\cdot(A\cdot D-B\cdot C)^2}\cdot\left[D\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C\cdot D+2\cdot A\cdot D\cdot N_u-2\cdot B\cdot C\cdot N_u\right]}{B\cdot\sqrt{\left[2\cdot N_u\cdot(A\cdot D-B\cdot C)+D\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C\cdot D\right]^2}\cdot(A\cdot D-B\cdot C)}=0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0:
$$-\frac{\sqrt{(A-1)^2}\cdot\left[2\cdot N_u-2\cdot A\cdot N_u-\sqrt{-(2\cdot A-1)\cdot(2\cdot A-3)}+1\right]}{\sqrt{\left[\sqrt{-(2\cdot A-1)\cdot(2\cdot A-3)}+2\cdot N_u\cdot(A-1)-1\right]^2}\cdot(A-1)}$$

0, 2, 0, 0:
$$\frac{\sqrt{B^2\cdot(B-1)^2}\cdot\left[B-2\cdot N_u-\sqrt{-(B-2)\cdot(3\cdot B-2)}+2\cdot B\cdot N_u\right]}{B\cdot(B-1)\cdot\sqrt{\left[B-\sqrt{-(B-2)\cdot(3\cdot B-2)}+2\cdot N_u\cdot(B-1)\right]^2}}$$

1, 2, 0, 0:
$$-\frac{\sqrt{B^2\cdot(A-B)^2}\cdot\left[B-2\cdot A\cdot N_u+2\cdot B\cdot N_u-\sqrt{(2\cdot A-3\cdot B)\cdot(B-2\cdot A)}\right]}{B\cdot\sqrt{\left[\sqrt{(2\cdot A-3\cdot B)\cdot(B-2\cdot A)}-B+2\cdot N_u\cdot(A-B)\right]^2}\cdot(A-B)}$$

0, 0, 3, 0:
$$\frac{\sqrt{(C-1)^2}\cdot\left[C-2\cdot N_u-\sqrt{-(C-2)\cdot(3\cdot C-2)}+2\cdot C\cdot N_u\right]}{(C-1)\cdot\sqrt{\left[C-\sqrt{-(C-2)\cdot(3\cdot C-2)}+2\cdot N_u\cdot(C-1)\right]^2}}$$

1, 0, 3, 0:
$$-\frac{\sqrt{(A-C)^2}\cdot\left[C-2\cdot A\cdot N_u+2\cdot C\cdot N_u-\sqrt{(2\cdot A-3\cdot C)\cdot(C-2\cdot A)}\right]}{\sqrt{\left[\sqrt{(2\cdot A-3\cdot C)\cdot(C-2\cdot A)}-C+2\cdot N_u\cdot(A-C)\right]^2}\cdot(A-C)}$$

0, 2, 3, 0:
$$-\frac{\sqrt{B^2\cdot(B\cdot C-1)^2}\cdot\left[2\cdot N_u+\sqrt{-(B\cdot C-2)\cdot(3\cdot B\cdot C-2)}-B\cdot C-2\cdot B\cdot C\cdot N_u\right]}{B\cdot\sqrt{\left[B\cdot C-\sqrt{-(B\cdot C-2)\cdot(3\cdot B\cdot C-2)}+2\cdot N_u\cdot(B\cdot C-1)\right]^2}\cdot(B\cdot C-1)}$$

1, 2, 3, 0:
$$-\frac{\sqrt{B^2\cdot(A-B\cdot C)^2}\cdot\left[B\cdot C-2\cdot A\cdot N_u-\sqrt{-(2\cdot A-B\cdot C)\cdot(2\cdot A-3\cdot B\cdot C)}+2\cdot B\cdot C\cdot N_u\right]}{B\cdot(A-B\cdot C)\cdot\sqrt{\left[\sqrt{-(2\cdot A-B\cdot C)\cdot(2\cdot A-3\cdot B\cdot C)}-B\cdot C+2\cdot N_u\cdot(A-B\cdot C)\right]^2}}$$

0, 0, 0, 4:

$$-\frac{\sqrt{(D-1)^2}\cdot\left[D+2\cdot N_u-D\cdot\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}-2\cdot D\cdot N_u\right]}{(D-1)\cdot\sqrt{\left[D\cdot\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}-D+2\cdot N_u\cdot(D-1)\right]^2}}$$

1, 0, 0, 4:

$$-\frac{\sqrt{(A\cdot D-1)^2}\cdot\left[D+2\cdot N_u-D\cdot\sqrt{-(2\cdot A\cdot D-1)\cdot(2\cdot A\cdot D-3)}-2\cdot A\cdot D\cdot N_u\right]}{\sqrt{\left[2\cdot N_u\cdot(A\cdot D-1)-D+D\cdot\sqrt{-(2\cdot A\cdot D-1)\cdot(2\cdot A\cdot D-3)}\right]^2}\cdot(A\cdot D-1)}$$

0, 2, 0, 4:

$$-\frac{\sqrt{B^2\cdot(B-D)^2}\cdot\left[D\cdot\sqrt{-(3\cdot B-2\cdot D)\cdot(B-2\cdot D)}-B\cdot D-2\cdot B\cdot N_u+2\cdot D\cdot N_u\right]}{B\cdot\sqrt{\left[B\cdot D-D\cdot\sqrt{-(3\cdot B-2\cdot D)\cdot(B-2\cdot D)}+2\cdot N_u\cdot(B-D)\right]^2}\cdot(B-D)}$$

1, 2, 0, 4:

$$\frac{\sqrt{B^2\cdot(B-A\cdot D)^2}\cdot\left[B\cdot D+2\cdot B\cdot N_u-D\cdot\sqrt{-(B-2\cdot A\cdot D)\cdot(3\cdot B-2\cdot A\cdot D)}-2\cdot A\cdot D\cdot N_u\right]}{B\cdot\sqrt{\left[B\cdot D-D\cdot\sqrt{-(B-2\cdot A\cdot D)\cdot(3\cdot B-2\cdot A\cdot D)}+2\cdot N_u\cdot(B-A\cdot D)\right]^2}\cdot(B-A\cdot D)}$$

0, 0, 3, 4:

$$-\frac{\sqrt{(C-D)^2}\cdot\left[D\cdot\sqrt{-(3\cdot C-2\cdot D)\cdot(C-2\cdot D)}-C\cdot D-2\cdot C\cdot N_u+2\cdot D\cdot N_u\right]}{\sqrt{\left[C\cdot D-D\cdot\sqrt{-(3\cdot C-2\cdot D)\cdot(C-2\cdot D)}+2\cdot N_u\cdot(C-D)\right]^2}\cdot(C-D)}$$

1, 0, 3, 4:

$$\frac{\sqrt{(C-A\cdot D)^2}\cdot\left[C\cdot D+2\cdot C\cdot N_u-D\cdot\sqrt{-(C-2\cdot A\cdot D)\cdot(3\cdot C-2\cdot A\cdot D)}-2\cdot A\cdot D\cdot N_u\right]}{\sqrt{\left[C\cdot D-D\cdot\sqrt{-(C-2\cdot A\cdot D)\cdot(3\cdot C-2\cdot A\cdot D)}+2\cdot N_u\cdot(C-A\cdot D)\right]^2}\cdot(C-A\cdot D)}$$

0, 2, 3, 4:

$$\frac{\sqrt{B^2\cdot(D-B\cdot C)^2}\cdot\left[D\cdot\sqrt{-(2\cdot D-B\cdot C)\cdot(2\cdot D-3\cdot B\cdot C)}+2\cdot D\cdot N_u-B\cdot C\cdot D-2\cdot B\cdot C\cdot N_u\right]}{B\cdot(D-B\cdot C)\cdot\sqrt{\left[D\cdot\sqrt{-(2\cdot D-B\cdot C)\cdot(2\cdot D-3\cdot B\cdot C)}+2\cdot N_u\cdot(D-B\cdot C)-B\cdot C\cdot D\right]^2}}$$

1, 2, 3, 4:

$$\frac{\sqrt{B^2\cdot(A\cdot D-B\cdot C)^2}\cdot\left[D\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C\cdot D+2\cdot A\cdot D\cdot N_u-2\cdot B\cdot C\cdot N_u\right]}{B\cdot\sqrt{\left[2\cdot N_u\cdot(A\cdot D-B\cdot C)+D\cdot\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}-B\cdot C\cdot D\right]^2}\cdot(A\cdot D-B\cdot C)}$$

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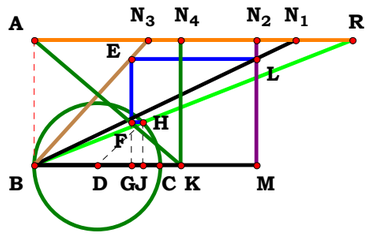

$N_1 = 2.09091$
$N_2 = 1.77778$
$N_3 = 0.90909$
$N_4 = 1.17172$
$R = 2.54547$

Unit. $AB := 1$ **Given.** $N_1 := 2.09091$ $N_2 := 1.77778$ $N_3 := .90909$

$N_4 := 1.17172$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)} + B\cdot C}{2\cdot(B\cdot C - A\cdot D)} = 2.545454$$

$$Num := \frac{\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)} + B\cdot C}{\sqrt{\left[\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)} + B\cdot C\right]^2}} \qquad Den := \frac{2\cdot(B\cdot C - A\cdot D)}{\sqrt{[2\cdot(B\cdot C - A\cdot D)]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{(2\cdot A\cdot D - 2\cdot B\cdot C)^2}\cdot\left[\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)} + B\cdot C\right]}{2\cdot(B\cdot C - A\cdot D)\cdot\sqrt{\left[\sqrt{(B\cdot C - 2\cdot A\cdot D)\cdot(2\cdot A\cdot D - 3\cdot B\cdot C)} + B\cdot C\right]^2}} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0: $-\frac{\sqrt{(2\cdot A-2)^2}\cdot\left[\sqrt{-(2\cdot A-1)\cdot(2\cdot A-3)}+1\right]}{\sqrt{\left[\sqrt{-(2\cdot A-1)\cdot(2\cdot A-3)}+1\right]^2}\cdot(2\cdot A-2)}$

0, 2, 0, 0: $\frac{\sqrt{(2\cdot B-2)^2}\cdot\left[B+\sqrt{-(B-2)\cdot(3\cdot B-2)}\right]}{\sqrt{\left[B+\sqrt{-(B-2)\cdot(3\cdot B-2)}\right]^2}\cdot(2\cdot B-2)}$

1, 2, 0, 0: $-\frac{\left[B+\sqrt{(2\cdot A-3\cdot B)\cdot(B-2\cdot A)}\right]\cdot\sqrt{(2\cdot A-2\cdot B)^2}}{(2\cdot A-2\cdot B)\cdot\sqrt{\left[B+\sqrt{(2\cdot A-3\cdot B)\cdot(B-2\cdot A)}\right]^2}}$

0, 0, 3, 0: $\frac{\sqrt{(2\cdot C-2)^2}\cdot\left[C+\sqrt{-(C-2)\cdot(3\cdot C-2)}\right]}{\sqrt{\left[C+\sqrt{-(C-2)\cdot(3\cdot C-2)}\right]^2}\cdot(2\cdot C-2)}$

1, 0, 3, 0: $-\frac{\left[C+\sqrt{(2\cdot A-3\cdot C)\cdot(C-2\cdot A)}\right]\cdot\sqrt{(2\cdot A-2\cdot C)^2}}{(2\cdot A-2\cdot C)\cdot\sqrt{\left[C+\sqrt{(2\cdot A-3\cdot C)\cdot(C-2\cdot A)}\right]^2}}$

0, 2, 3, 0: $\frac{\sqrt{(2\cdot B\cdot C-2)^2}\cdot\left[\sqrt{-(B\cdot C-2)\cdot(3\cdot B\cdot C-2)}+B\cdot C\right]}{\sqrt{\left[\sqrt{-(B\cdot C-2)\cdot(3\cdot B\cdot C-2)}+B\cdot C\right]^2}\cdot(2\cdot B\cdot C-2)}$

1, 2, 3, 0: $\frac{\sqrt{(2\cdot A\cdot 1-2\cdot B\cdot C)^2}\cdot\left[\sqrt{(B\cdot C-2\cdot A\cdot 1)\cdot(2\cdot A\cdot 1-3\cdot B\cdot C)}+B\cdot C\right]}{2\cdot(B\cdot C-A\cdot 1)\cdot\sqrt{\left[\sqrt{(B\cdot C-2\cdot A\cdot 1)\cdot(2\cdot A\cdot 1-3\cdot B\cdot C)}+B\cdot C\right]^2}}$

0, 0, 0, 4: $-\frac{\sqrt{(2\cdot D-2)^2}\cdot\left[\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}+1\right]}{\sqrt{\left[\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}+1\right]^2}\cdot(2\cdot D-2)}$

1, 0, 0, 4: $-\frac{\sqrt{(2\cdot A\cdot D-2)^2}\cdot\left[\sqrt{-(2\cdot A\cdot D-1)\cdot(2\cdot A\cdot D-3)}+1\right]}{\sqrt{\left[\sqrt{-(2\cdot A\cdot D-1)\cdot(2\cdot A\cdot D-3)}+1\right]^2}\cdot(2\cdot A\cdot D-2)}$

0, 2, 0, 4: $\frac{\left[B+\sqrt{-(3\cdot B-2\cdot D)\cdot(B-2\cdot D)}\right]\cdot\sqrt{(2\cdot B-2\cdot D)^2}}{(2\cdot B-2\cdot D)\cdot\sqrt{\left[B+\sqrt{-(3\cdot B-2\cdot D)\cdot(B-2\cdot D)}\right]^2}}$

1, 2, 0, 4: $\frac{\sqrt{(2\cdot B-2\cdot A\cdot D)^2}\cdot\left[B+\sqrt{-(B-2\cdot A\cdot D)\cdot(3\cdot B-2\cdot A\cdot D)}\right]}{\sqrt{\left[B+\sqrt{-(B-2\cdot A\cdot D)\cdot(3\cdot B-2\cdot A\cdot D)}\right]^2}\cdot(2\cdot B-2\cdot A\cdot D)}$

0, 0, 3, 4: $\frac{\left[C+\sqrt{-(3\cdot C-2\cdot D)\cdot(C-2\cdot D)}\right]\cdot\sqrt{(2\cdot C-2\cdot D)^2}}{(2\cdot C-2\cdot D)\cdot\sqrt{\left[C+\sqrt{-(3\cdot C-2\cdot D)\cdot(C-2\cdot D)}\right]^2}}$

1, 0, 3, 4: $\frac{\sqrt{(2\cdot C-2\cdot A\cdot D)^2}\cdot\left[C+\sqrt{-(C-2\cdot A\cdot D)\cdot(3\cdot C-2\cdot A\cdot D)}\right]}{\sqrt{\left[C+\sqrt{-(C-2\cdot A\cdot D)\cdot(3\cdot C-2\cdot A\cdot D)}\right]^2}\cdot(2\cdot C-2\cdot A\cdot D)}$

0, 2, 3, 4: $-\frac{\left[B\cdot C+\sqrt{-(2\cdot D-B\cdot C)\cdot(2\cdot D-3\cdot B\cdot C)}\right]\cdot\sqrt{(2\cdot D-2\cdot B\cdot C)^2}}{\sqrt{\left[B\cdot C+\sqrt{-(2\cdot D-B\cdot C)\cdot(2\cdot D-3\cdot B\cdot C)}\right]^2}\cdot(2\cdot D-2\cdot B\cdot C)}$

1, 2, 3, 4: $\frac{\sqrt{(2\cdot A\cdot D-2\cdot B\cdot C)^2}\cdot\left[\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}+B\cdot C\right]}{2\cdot(B\cdot C-A\cdot D)\cdot\sqrt{\left[\sqrt{(B\cdot C-2\cdot A\cdot D)\cdot(2\cdot A\cdot D-3\cdot B\cdot C)}+B\cdot C\right]^2}}$

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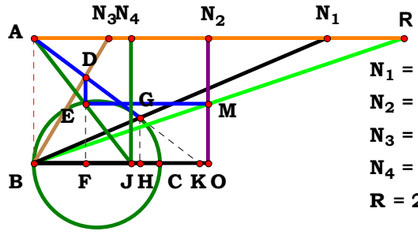

$N_1 = 2.34343$
$N_2 = 1.39394$
$N_3 = 0.59596$
$N_4 = 0.77778$
$R = 2.95561$

Unit. $AB := 1$ **Given.** $N_1 := 2.34343$ $N_2 := 1.39394$ $N_3 := .59596$ $N_4 := .77778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2 + C \cdot N_u\right)}{B \cdot \left(A^2 + {N_u}^2 - A \cdot N_u + C \cdot N_u - D \cdot N_u\right)} = 2.955605$$

$$Num := \frac{N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2 + C \cdot N_u\right)}{\sqrt{\left[N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2 + C \cdot N_u\right)\right]^2}}$$

$$Den := \frac{B \cdot \left(A^2 + {N_u}^2 - A \cdot N_u + C \cdot N_u - D \cdot N_u\right)}{\sqrt{\left[B \cdot \left(A^2 + {N_u}^2 - A \cdot N_u + C \cdot N_u - D \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2 + {N_u}^2 - A \cdot N_u + C \cdot N_u - D \cdot N_u\right)^2} \cdot \left(A^2 - A \cdot N_u + {N_u}^2 + C \cdot N_u\right)}{B \cdot \sqrt{{N_u}^2 \cdot \left(A^2 - A \cdot N_u + {N_u}^2 + C \cdot N_u\right)^2} \cdot \left(A^2 + {N_u}^2 - A \cdot N_u + C \cdot N_u - D \cdot N_u\right)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0:

$$\frac{N_u \cdot \left(N_u^{\,2}+1\right) \cdot \sqrt{\left(N_u^{\,2}-N_u+1\right)^2}}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}$$

1, 0, 0, 0:

$$\frac{N_u \cdot \sqrt{\left(A^2-A \cdot N_u+N_u^{\,2}\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}+N_u\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}+N_u\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)}$$

0, 2, 0, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(N_u^{\,2}-N_u+1\right)^2} \cdot \left(N_u^{\,2}+1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}+1\right)^2} \cdot \left(N_u^{\,2}-N_u+1\right)}$$

1, 2, 0, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}+N_u\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}+N_u\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}\right)}$$

0, 0, 3, 0:

$$\frac{N_u \cdot \sqrt{\left(N_u^{\,2}-2 \cdot N_u+C \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}-N_u+C \cdot N_u+1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}-N_u+C \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}-2 \cdot N_u+C \cdot N_u+1\right)}$$

1, 0, 3, 0:

$$\frac{N_u \cdot \sqrt{\left(A^2-N_u+N_u^{\,2}-A \cdot N_u+C \cdot N_u\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}+C \cdot N_u\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}+C \cdot N_u\right)^2} \cdot \left(A^2-N_u+N_u^{\,2}-A \cdot N_u+C \cdot N_u\right)}$$

0, 2, 3, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(N_u^{\,2}-2 \cdot N_u+C \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}-N_u+C \cdot N_u+1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2}-N_u+C \cdot N_u+1\right)^2} \cdot \left(N_u^{\,2}-2 \cdot N_u+C \cdot N_u+1\right)}$$

1, 2, 3, 0:

$$\frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2-N_u+N_u^{\,2}-A \cdot N_u+C \cdot N_u\right)^2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}+C \cdot N_u\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2-A \cdot N_u+N_u^{\,2}+C \cdot N_u\right)^2} \cdot \left(A^2-N_u+N_u^{\,2}-A \cdot N_u+C \cdot N_u\right)}$$

0, 0, 0, 4: $$\frac{N_u \cdot \sqrt{\left(N_u^{\,2} - D \cdot N_u + 1\right)^2} \cdot \left(N_u^{\,2} + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} + 1\right)^2} \cdot \left(N_u^{\,2} - D \cdot N_u + 1\right)}$$

1, 0, 0, 4: $$\frac{N_u \cdot \sqrt{\left(N_u + A^2 + N_u^{\,2} - A \cdot N_u - D \cdot N_u\right)^2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2} + N_u\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2} + N_u\right)^2} \cdot \left(N_u + A^2 + N_u^{\,2} - A \cdot N_u - D \cdot N_u\right)}$$

0, 2, 0, 4: $$\frac{N_u \cdot \sqrt{B^2 \cdot \left(N_u^{\,2} - D \cdot N_u + 1\right)^2} \cdot \left(N_u^{\,2} + 1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} + 1\right)^2} \cdot \left(N_u^{\,2} - D \cdot N_u + 1\right)}$$

1, 2, 0, 4: $$\frac{N_u \cdot \sqrt{B^2 \cdot \left(N_u + A^2 + N_u^{\,2} - A \cdot N_u - D \cdot N_u\right)^2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2} + N_u\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2} + N_u\right)^2} \cdot \left(N_u + A^2 + N_u^{\,2} - A \cdot N_u - D \cdot N_u\right)}$$

0, 0, 3, 4: $$\frac{N_u \cdot \sqrt{\left(N_u^{\,2} - N_u + C \cdot N_u - D \cdot N_u + 1\right)^2} \cdot \left(N_u^{\,2} - N_u + C \cdot N_u + 1\right)}{\sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - N_u + C \cdot N_u + 1\right)^2} \cdot \left(N_u^{\,2} - N_u + C \cdot N_u - D \cdot N_u + 1\right)}$$

1, 0, 3, 4: $$\frac{N_u \cdot \sqrt{\left(A^2 + N_u^{\,2} - A \cdot N_u + C \cdot N_u - D \cdot N_u\right)^2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2} + C \cdot N_u\right)}{\sqrt{N_u^{\,2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2} + C \cdot N_u\right)^2} \cdot \left(A^2 + N_u^{\,2} - A \cdot N_u + C \cdot N_u - D \cdot N_u\right)}$$

0, 2, 3, 4: $$\frac{N_u \cdot \sqrt{B^2 \cdot \left(N_u^{\,2} - N_u + C \cdot N_u - D \cdot N_u + 1\right)^2} \cdot \left(N_u^{\,2} - N_u + C \cdot N_u + 1\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(N_u^{\,2} - N_u + C \cdot N_u + 1\right)^2} \cdot \left(N_u^{\,2} - N_u + C \cdot N_u - D \cdot N_u + 1\right)}$$

1, 2, 3, 4: $$\frac{N_u \cdot \sqrt{B^2 \cdot \left(A^2 + N_u^{\,2} - A \cdot N_u + C \cdot N_u - D \cdot N_u\right)^2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2} + C \cdot N_u\right)}{B \cdot \sqrt{N_u^{\,2} \cdot \left(A^2 - A \cdot N_u + N_u^{\,2} + C \cdot N_u\right)^2} \cdot \left(A^2 + N_u^{\,2} - A \cdot N_u + C \cdot N_u - D \cdot N_u\right)}$$

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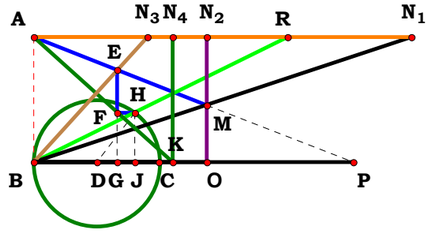


$N_1 = 3.02020$
$N_2 = 1.38384$
$N_3 = 0.90909$
$N_4 = 1.11111$
$R = 2.02852$

Unit. $AB := 1$ Given. $N_1 := 3.02020$ $N_2 := 1.38384$ $N_3 := .90909$

$N_4 := 1.11111$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A - B - C - \sqrt{(B - A + C - 2\cdot D)\cdot(3\cdot A - 3\cdot B - 3\cdot C + 2\cdot D)}}{2\cdot(A - B - C + D)} = 2.028529$$

$$Num := \frac{A - B - C - \sqrt{(B - A + C - 2\cdot D)\cdot(3\cdot A - 3\cdot B - 3\cdot C + 2\cdot D)}}{\sqrt{\left[A - B - C - \sqrt{(B - A + C - 2\cdot D)\cdot(3\cdot A - 3\cdot B - 3\cdot C + 2\cdot D)}\right]^2}}$$

$$Den := \frac{2\cdot(A - B - C + D)}{\sqrt{[2\cdot(A - B - C + D)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{\sqrt{(2\cdot A - 2\cdot B - 2\cdot C + 2\cdot D)^2}\cdot\left[A - B - C - \sqrt{-(A - B - C + 2\cdot D)\cdot(3\cdot A - 3\cdot B - 3\cdot C + 2\cdot D)}\right]}{2\cdot\sqrt{\left[B - A + C + \sqrt{-(A - B - C + 2\cdot D)\cdot(3\cdot A - 3\cdot B - 3\cdot C + 2\cdot D)}\right]^2}\cdot(A - B - C + D)} = 0$$

For 4 variables there are 16 subsets.

0, 0, 0, 0: 0

1, 0, 0, 0: $$-\frac{\sqrt{(2\cdot A-2)^2}\cdot\left[\sqrt{-A\cdot(3\cdot A-4)}-A+2\right]}{2\cdot(A-1)\cdot\sqrt{\left[\sqrt{-A\cdot(3\cdot A-4)}-A+2\right]^2}}$$

0, 2, 0, 0: 0

1, 2, 0, 0: $$-\frac{\sqrt{(2\cdot A-2)^2}\cdot\left[\sqrt{-A\cdot(3\cdot A-4)}-A+2\right]}{2\cdot(A-1)\cdot\sqrt{\left[\sqrt{-A\cdot(3\cdot A-4)}-A+2\right]^2}}$$

0, 0, 3, 0: $$\frac{\sqrt{(2\cdot B+2\cdot C-4)^2}\cdot\left[B+C+\sqrt{-(3\cdot B+3\cdot C-5)\cdot(B+C-3)}-1\right]}{2\cdot\sqrt{\left[B+C+\sqrt{-(3\cdot B+3\cdot C-5)\cdot(B+C-3)}-1\right]^2}\cdot(B+C-2)}$$

1, 0, 3, 0: $$-\frac{\sqrt{(2\cdot A-2\cdot B-2\cdot C+2)^2}\cdot\left[B-A+C+\sqrt{-(3\cdot A-3\cdot B-3\cdot C+2)\cdot(A-B-C+2)}\right]}{2\cdot\sqrt{\left[B-A+C+\sqrt{-(3\cdot A-3\cdot B-3\cdot C+2)\cdot(A-B-C+2)}\right]^2}\cdot(A-B-C+1)}$$

0, 2, 3, 0: $$\frac{\sqrt{(2\cdot B+2\cdot C-4)^2}\cdot\left[B+C+\sqrt{-(3\cdot B+3\cdot C-5)\cdot(B+C-3)}-1\right]}{2\cdot\sqrt{\left[B+C+\sqrt{-(3\cdot B+3\cdot C-5)\cdot(B+C-3)}-1\right]^2}\cdot(B+C-2)}$$

1, 2, 3, 0: $$-\frac{\sqrt{(2\cdot A-2\cdot B-2\cdot C+2)^2}\cdot\left[B-A+C+\sqrt{-(3\cdot A-3\cdot B-3\cdot C+2)\cdot(A-B-C+2)}\right]}{2\cdot\sqrt{\left[B-A+C+\sqrt{-(3\cdot A-3\cdot B-3\cdot C+2)\cdot(A-B-C+2)}\right]^2}\cdot(A-B-C+1)}$$

0, 0, 0, 4:

$$-\frac{\sqrt{(2\cdot D-2)^2}\cdot\left[\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}+1\right]}{2\cdot(D-1)\cdot\sqrt{\left[\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}+1\right]^2}}$$

1, 0, 0, 4:

$$-\frac{\sqrt{(2\cdot A+2\cdot D-4)^2}\cdot\left[\sqrt{-(3\cdot A+2\cdot D-6)\cdot(A+2\cdot D-2)}-A+2\right]}{2\cdot\sqrt{\left[\sqrt{-(3\cdot A+2\cdot D-6)\cdot(A+2\cdot D-2)}-A+2\right]^2}\cdot(A+D-2)}$$

0, 2, 0, 4:

$$-\frac{\sqrt{(2\cdot D-2)^2}\cdot\left[\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}+1\right]}{2\cdot(D-1)\cdot\sqrt{\left[\sqrt{-(2\cdot D-1)\cdot(2\cdot D-3)}+1\right]^2}}$$

1, 2, 0, 4:

$$-\frac{\sqrt{(2\cdot A+2\cdot D-4)^2}\cdot\left[\sqrt{-(3\cdot A+2\cdot D-6)\cdot(A+2\cdot D-2)}-A+2\right]}{2\cdot\sqrt{\left[\sqrt{-(3\cdot A+2\cdot D-6)\cdot(A+2\cdot D-2)}-A+2\right]^2}\cdot(A+D-2)}$$

0, 0, 3, 4:

$$\frac{\sqrt{(2\cdot B+2\cdot C-2\cdot D-2)^2}\cdot\left[B+C+\sqrt{-(3\cdot B+3\cdot C-2\cdot D-3)\cdot(B+C-2\cdot D-1)}-1\right]}{2\cdot\sqrt{\left[B+C+\sqrt{-(3\cdot B+3\cdot C-2\cdot D-3)\cdot(B+C-2\cdot D-1)}-1\right]^2}\cdot(B+C-D-1)}$$

1, 0, 3, 4:

$$-\frac{\sqrt{(2\cdot A-2\cdot B-2\cdot C+2\cdot D)^2}\cdot\left[B-A+C+\sqrt{-(A-B-C+2\cdot D)\cdot(3\cdot A-3\cdot B-3\cdot C+2\cdot D)}\right]}{2\cdot\sqrt{\left[B-A+C+\sqrt{-(A-B-C+2\cdot D)\cdot(3\cdot A-3\cdot B-3\cdot C+2\cdot D)}\right]^2}\cdot(A-B-C+D)}$$

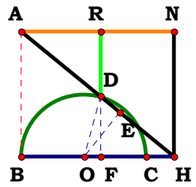
0, 2, 3, 4:

$$\frac{\sqrt{(2\cdot B+2\cdot C-2\cdot D-2)^2}\cdot\left[B+C+\sqrt{-(3\cdot B+3\cdot C-2\cdot D-3)\cdot(B+C-2\cdot D-1)}-1\right]}{2\cdot\sqrt{\left[B+C+\sqrt{-(3\cdot B+3\cdot C-2\cdot D-3)\cdot(B+C-2\cdot D-1)}-1\right]^2}\cdot(B+C-D-1)}$$

1, 2, 3, 4:

$$\frac{\sqrt{(2\cdot A-2\cdot B-2\cdot C+2\cdot D)^2}\cdot\left[A-B-C-\sqrt{-(A-B-C+2\cdot D)\cdot(3\cdot A-3\cdot B-3\cdot C+2\cdot D)}\right]}{2\cdot\sqrt{\left[B-A+C+\sqrt{-(A-B-C+2\cdot D)\cdot(3\cdot A-3\cdot B-3\cdot C+2\cdot D)}\right]^2}\cdot(A-B-C+D)}$$

3OBT9R0



N = 1.22222
R = 0.63319

Unit. $AB := 1$ **Given.** $N := 1.22222$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{N_u \cdot \left[2 \cdot A + N_u - \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]}{2 \cdot \left(A^2 + {N_u}^2\right)} = 0.633191$$

$$Num := \frac{N_u \cdot \left[2 \cdot A + N_u - \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]}{\sqrt{\left[N_u \cdot \left[2 \cdot A + N_u - \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]\right]^2}}$$

$$Den := \frac{2 \cdot \left(A^2 + {N_u}^2\right)}{\sqrt{\left[2 \cdot \left(A^2 + {N_u}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

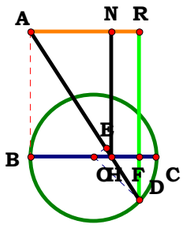
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{N_u \cdot \sqrt{\left(2 \cdot A^2 + 2 \cdot {N_u}^2\right)^2} \cdot \left[2 \cdot A + N_u - \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]}{2 \cdot \sqrt{{N_u}^2 \cdot \left[2 \cdot A + N_u - \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]^2} \cdot \left(A^2 + {N_u}^2\right)} = 1$$

$$L - \frac{N_u \cdot \sqrt{\left(2 \cdot A^2 + 2 \cdot {N_u}^2\right)^2} \cdot \left[2 \cdot A + N_u - \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]}{2 \cdot \sqrt{{N_u}^2 \cdot \left[2 \cdot A + N_u - \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]^2} \cdot \left(A^2 + {N_u}^2\right)} = 0$$

3OBT9R1



N = 0.64646
R = 0.86640

Unit. $AB := 1$ Given. $N := .64646$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{N_u \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]}{2 \cdot \left(A^2 + {N_u}^2\right)} = 0.8664$$

$$Num := \frac{N_u \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]}{\sqrt{\left[N_u \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]\right]^2}}$$

$$Den := \frac{2 \cdot \left(A^2 + {N_u}^2\right)}{\sqrt{\left[2 \cdot \left(A^2 + {N_u}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

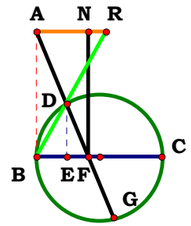
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{N_u \cdot \sqrt{\left(2 \cdot A^2 + 2 \cdot {N_u}^2\right)^2} \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]}{2 \cdot \left(A^2 + {N_u}^2\right) \cdot \sqrt{{N_u}^2 \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]^2}} = 1$$

$$L - \frac{N_u \cdot \sqrt{\left(2 \cdot A^2 + 2 \cdot {N_u}^2\right)^2} \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]}{2 \cdot \left(A^2 + {N_u}^2\right) \cdot \sqrt{{N_u}^2 \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]^2}} = 0$$

3OBT9R2



N = 0.41414
R = 0.55859

Unit. $AB := 1$ **Given.** $N := .41414$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{N_u \cdot \left[\sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} - N_u - 2 \cdot A\right]}{A \cdot N_u - 2 \cdot N_u^{\,2} - A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}} = 0.558594$$

$$Num := \frac{N_u \cdot \left[\sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} - N_u - 2 \cdot A\right]}{\sqrt{\left[N_u \cdot \left[\sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} - N_u - 2 \cdot A\right]\right]^2}}$$

$$Den := \frac{A \cdot N_u - 2 \cdot N_u^{\,2} - A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}}{\sqrt{\left[A \cdot N_u - 2 \cdot N_u^{\,2} - A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]^2}} \qquad L := \frac{Num}{Den}$$

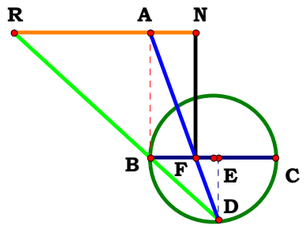
Definitions.

$Num = -1$ $Den = -1$ $L = 1$

$$\frac{N_u \cdot \sqrt{\left[A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} + 2 \cdot N_u^{\,2} - A \cdot N_u\right]^2} \cdot \left[\sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} - N_u - 2 \cdot A\right]}{\sqrt{N_u^{\,2} \cdot \left[2 \cdot A + N_u - \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]^2} \cdot \left[A \cdot N_u - 2 \cdot N_u^{\,2} - A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]} = 1$$

$$L - \frac{N_u \cdot \sqrt{\left[A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} + 2 \cdot N_u^{\,2} - A \cdot N_u\right]^2} \cdot \left[\sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} - N_u - 2 \cdot A\right]}{\sqrt{N_u^{\,2} \cdot \left[2 \cdot A + N_u - \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]^2} \cdot \left[A \cdot N_u - 2 \cdot N_u^{\,2} - A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]} = 0$$

3OBT9R3



N = 0.36364
R = -1.09384

Unit. $AB := 1$ Given. $N := .36364$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{N_u \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]}{2 \cdot {N_u}^2 - A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} - A \cdot N_u} = -1.093848$$

$$Num := \frac{N_u \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]}{\sqrt{\left[N_u \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]\right]^2}}$$

$$Den := \frac{2 \cdot {N_u}^2 - A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} - A \cdot N_u}{\sqrt{\left[2 \cdot {N_u}^2 - A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} - A \cdot N_u\right]^2}} \qquad L := \frac{Num}{Den}$$

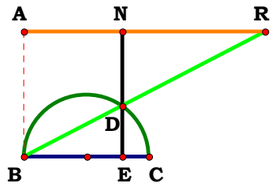
Definitions.

$Num = 1$ $Den = -1$ $L = -1$

$$\frac{N_u \cdot \sqrt{\left[A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} - 2 \cdot {N_u}^2 + A \cdot N_u\right]^2} \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]}{\sqrt{{N_u}^2 \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]^2} \cdot \left[2 \cdot {N_u}^2 - A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} - A \cdot N_u\right]} = -1$$

$$L - \frac{N_u \cdot \sqrt{\left[A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} - 2 \cdot {N_u}^2 + A \cdot N_u\right]^2} \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]}{\sqrt{{N_u}^2 \cdot \left[2 \cdot A + N_u + \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)}\right]^2} \cdot \left[2 \cdot {N_u}^2 - A \cdot \sqrt{N_u \cdot (4 \cdot A - 3 \cdot N_u)} - A \cdot N_u\right]} = 0$$

3OBT9R4



N = 0.78788
R = 1.92725

Unit. $AB := 1$ Given. $N := .78788$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$\frac{N_u}{\sqrt{N_u \cdot (A - N_u)}} = 1.927255$ $Num := \frac{N_u}{\sqrt{(N_u)^2}}$ $Den := \frac{\sqrt{N_u \cdot (A - N_u)}}{\sqrt{\left[\sqrt{N_u \cdot (A - N_u)}\right]^2}}$ $L := \frac{Num}{Den}$

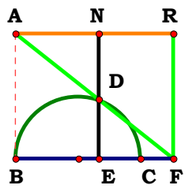
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$\frac{N_u}{\sqrt{N_u{}^2}} = 1$

$L - \frac{N_u}{\sqrt{N_u{}^2}} = 0$

3OBT9R5



N = 0.66667
R = 1.26120

Unit. $AB := 1$ Given. $N := .66667$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{N_u}{A - \sqrt{N_u \cdot (A - N_u)}} = 1.261207$$

$$Num := \frac{N_u}{\sqrt{(N_u)^2}}$$

$$Den := \frac{A - \sqrt{N_u \cdot (A - N_u)}}{\sqrt{\left[A - \sqrt{N_u \cdot (A - N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

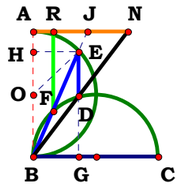
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{N_u \cdot \sqrt{\left[A - \sqrt{N_u \cdot (A - N_u)}\right]^2}}{\sqrt{N_u^2} \cdot \left[A - \sqrt{N_u \cdot (A - N_u)}\right]} = 1$$

$$L - \frac{N_u \cdot \sqrt{\left[A - \sqrt{N_u \cdot (A - N_u)}\right]^2}}{\sqrt{N_u^2} \cdot \left[A - \sqrt{N_u \cdot (A - N_u)}\right]} = 0$$

3OBT10AR0



N = 0.75758
R = 0.15790

Unit. $AB := 1$ **Given.** $N := .75758$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A^2 - \sqrt{(A+N_u)\cdot(A^2+3\cdot N_u^{\,2})\cdot(A-N_u)} + N_u^{\,2}}{2\cdot(A^2+N_u^{\,2})} = 0.157899$$

$$Num := \frac{A^2 - \sqrt{(A+N_u)\cdot(A^2+3\cdot N_u^{\,2})\cdot(A-N_u)} + N_u^{\,2}}{\sqrt{\left[A^2 - \sqrt{(A+N_u)\cdot(A^2+3\cdot N_u^{\,2})\cdot(A-N_u)} + N_u^{\,2}\right]^2}}$$

$$Den := \frac{2\cdot(A^2+N_u^{\,2})}{\sqrt{\left[2\cdot(A^2+N_u^{\,2})\right]^2}} \qquad L := \frac{Num}{Den}$$

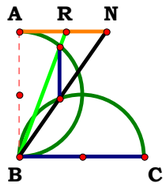
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{(2\cdot A^2+2\cdot N_u^{\,2})^2}\cdot\left[A^2 - \sqrt{(A+N_u)\cdot(A^2+3\cdot N_u^{\,2})\cdot(A-N_u)} + N_u^{\,2}\right]}{2\cdot\sqrt{\left[A^2 - \sqrt{(A+N_u)\cdot(A^2+3\cdot N_u^{\,2})\cdot(A-N_u)} + N_u^{\,2}\right]^2}\cdot(A^2+N_u^{\,2})} = 1$$

$$L - \frac{\sqrt{(2\cdot A^2+2\cdot N_u^{\,2})^2}\cdot\left[A^2 - \sqrt{(A+N_u)\cdot(A^2+3\cdot N_u^{\,2})\cdot(A-N_u)} + N_u^{\,2}\right]}{2\cdot\sqrt{\left[A^2 - \sqrt{(A+N_u)\cdot(A^2+3\cdot N_u^{\,2})\cdot(A-N_u)} + N_u^{\,2}\right]^2}\cdot(A^2+N_u^{\,2})} = 0$$

3OBT10AR1



N = 0.69697
R = 0.37225

Unit. $AB := 1$ Given. $N := .69697$

$N_u := 3$ $A := \frac{N_u}{N}$

$$\frac{A^2 - \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^{\,2})\cdot(A - N_u)} + N_u^{\,2}}{2\cdot N_u^{\,2}} = 0.372253$$

$$Num := \frac{A^2 - \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^{\,2})\cdot(A - N_u)} + N_u^{\,2}}{\sqrt{\left[A^2 - \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^{\,2})\cdot(A - N_u)} + N_u^{\,2}\right]^2}}$$

$$Den := \frac{2\cdot N_u^{\,2}}{\sqrt{(2\cdot N_u^{\,2})^2}}$$

$$L := \frac{Num}{Den}$$

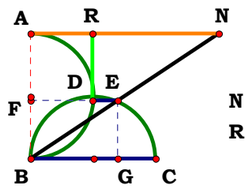
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{N_u^{\,4}}\cdot\left[A^2 - \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^{\,2})\cdot(A - N_u)} + N_u^{\,2}\right]}{N_u^{\,2}\cdot\sqrt{\left[A^2 - \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^{\,2})\cdot(A - N_u)} + N_u^{\,2}\right]^2}} = 1$$

$$L - \frac{\sqrt{N_u^{\,4}}\cdot\left[A^2 - \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^{\,2})\cdot(A - N_u)} + N_u^{\,2}\right]}{N_u^{\,2}\cdot\sqrt{\left[A^2 - \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^{\,2})\cdot(A - N_u)} + N_u^{\,2}\right]^2}} = 0$$

3OBT10AR2



N = 1.50505
R = 0.49847

Unit. $AB := 1$ Given. $N := 1.50505$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{\sqrt{A \cdot N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}}{A^2 + {N_u}^2} = 0.498472$$

$$Num := \frac{\sqrt{A \cdot N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}}{\sqrt{\left[\sqrt{A \cdot N_u \cdot \left(A^2 - A \cdot N_u + {N_u}^2\right)}\right]^2}}$$

$$Den := \frac{A^2 + {N_u}^2}{\sqrt{\left(A^2 + {N_u}^2\right)^2}}$$

$$L := \frac{Num}{Den}$$

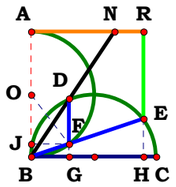
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{\left(A^2 + {N_u}^2\right)^2}}{A^2 + {N_u}^2} = 1$$

$$L - \frac{\sqrt{\left(A^2 + {N_u}^2\right)^2}}{A^2 + {N_u}^2} = 0$$

3OBT10AR3



N = 0.66667
R = 0.89411

Unit. $AB := 1$ Given. $N := .66667$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A^2 + \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^2)\cdot(A - N_u)} + N_u^2}{2\cdot(A^2 + N_u^2)} = 0.894112$$

$$Num := \frac{A^2 + \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^2)\cdot(A - N_u)} + N_u^2}{\sqrt{\left[A^2 + \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^2)\cdot(A - N_u)} + N_u^2\right]^2}}$$

$$Den := \frac{2\cdot(A^2 + N_u^2)}{\sqrt{\left[2\cdot(A^2 + N_u^2)\right]^2}} \qquad L := \frac{Num}{Den}$$

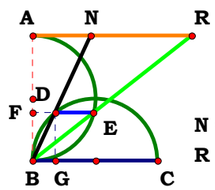
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{(2\cdot A^2 + 2\cdot N_u^2)^2}\cdot\left[A^2 + \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^2)\cdot(A - N_u)} + N_u^2\right]}{2\cdot(A^2 + N_u^2)\cdot\sqrt{\left[A^2 + \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^2)\cdot(A - N_u)} + N_u^2\right]^2}} = 1$$

$$L - \frac{\sqrt{(2\cdot A^2 + 2\cdot N_u^2)^2}\cdot\left[A^2 + \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^2)\cdot(A - N_u)} + N_u^2\right]}{2\cdot(A^2 + N_u^2)\cdot\sqrt{\left[A^2 + \sqrt{(A + N_u)\cdot(A^2 + 3\cdot N_u^2)\cdot(A - N_u)} + N_u^2\right]^2}} = 0$$

3OBT10AR4



N = 0.46465
R = 1.27154

Unit. $AB := 1$ Given. $N := .46465$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}}{\sqrt{A} \cdot N_u} = 1.271537$$

$$Num := \frac{\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}}{\sqrt{\left[\sqrt{N_u \cdot \left(A^2 - A \cdot N_u + N_u^{\,2}\right)}\right]^2}}$$

$$Den := \frac{\sqrt{A} \cdot N_u}{\sqrt{\left(\sqrt{A} \cdot N_u\right)^2}}$$

$$L := \frac{Num}{Den}$$

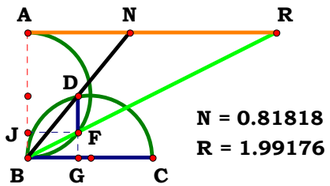
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{A \cdot N_u^{\,2}}}{\sqrt{A} \cdot N_u} = 1$$

$$L - \frac{\sqrt{A \cdot N_u^{\,2}}}{\sqrt{A} \cdot N_u} = 0$$

3OBT10AR5



Unit. $AB := 1$ Given. $N := .81818$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{2 \cdot N_u^2}{A^2 - \sqrt{(A + N_u) \cdot (A^2 + 3 \cdot N_u^2) \cdot (A - N_u)} + N_u^2} = 1.991767$$

$$Num := \frac{2 \cdot N_u^2}{\sqrt{(2 \cdot N_u^2)^2}}$$

$$Den := \frac{A^2 - \sqrt{(A + N_u) \cdot (A^2 + 3 \cdot N_u^2) \cdot (A - N_u)} + N_u^2}{\sqrt{\left[A^2 - \sqrt{(A + N_u) \cdot (A^2 + 3 \cdot N_u^2) \cdot (A - N_u)} + N_u^2\right]^2}}$$

$$L := \frac{Num}{Den}$$

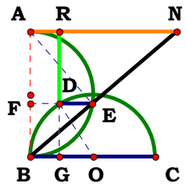
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{N_u^2 \cdot \sqrt{\left[A^2 - \sqrt{(A + N_u) \cdot (A^2 + 3 \cdot N_u^2) \cdot (A - N_u)} + N_u^2\right]^2}}{\sqrt{N_u^4} \cdot \left[A^2 - \sqrt{(A + N_u) \cdot (A^2 + 3 \cdot N_u^2) \cdot (A - N_u)} + N_u^2\right]} = 1$$

$$L - \frac{N_u^2 \cdot \sqrt{\left[A^2 - \sqrt{(A + N_u) \cdot (A^2 + 3 \cdot N_u^2) \cdot (A - N_u)} + N_u^2\right]^2}}{\sqrt{N_u^4} \cdot \left[A^2 - \sqrt{(A + N_u) \cdot (A^2 + 3 \cdot N_u^2) \cdot (A - N_u)} + N_u^2\right]} = 0$$

3OBT10BR0



N = 1.17172
R = 0.23092

Unit. $AB := 1$ Given. $N := 1.17172$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A^2 + N_u{}^2 - \sqrt{(N_u - A)\cdot(A + N_u)\cdot(3\cdot A^2 + N_u{}^2)}}{2\cdot(A^2 + N_u{}^2)} = 0.230918$$

$$Num := \frac{A^2 + N_u{}^2 - \sqrt{(N_u - A)\cdot(A + N_u)\cdot(3\cdot A^2 + N_u{}^2)}}{\sqrt{\left[A^2 + N_u{}^2 - \sqrt{(N_u - A)\cdot(A + N_u)\cdot(3\cdot A^2 + N_u{}^2)}\right]^2}}$$

$$Den := \frac{2\cdot(A^2 + N_u{}^2)}{\sqrt{\left[2\cdot(A^2 + N_u{}^2)\right]^2}}$$

$$L := \frac{Num}{Den}$$

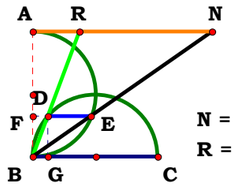
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{(2\cdot A^2 + 2\cdot N_u{}^2)^2}\cdot\left[A^2 - \sqrt{-(A + N_u)\cdot(3\cdot A^2 + N_u{}^2)\cdot(A - N_u)} + N_u{}^2\right]}{2\cdot\sqrt{\left[A^2 - \sqrt{-(A + N_u)\cdot(3\cdot A^2 + N_u{}^2)\cdot(A - N_u)} + N_u{}^2\right]^2}\cdot(A^2 + N_u{}^2)} = 1$$

$$L - \frac{\sqrt{(2\cdot A^2 + 2\cdot N_u{}^2)^2}\cdot\left[A^2 - \sqrt{-(A + N_u)\cdot(3\cdot A^2 + N_u{}^2)\cdot(A - N_u)} + N_u{}^2\right]}{2\cdot\sqrt{\left[A^2 - \sqrt{-(A + N_u)\cdot(3\cdot A^2 + N_u{}^2)\cdot(A - N_u)} + N_u{}^2\right]^2}\cdot(A^2 + N_u{}^2)} = 0$$

3OBT10BR1



Unit. $AB := 1$ Given. $N := 1.43434$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A^2 + N_u{}^2 - \sqrt{\left[\left(N_u - A\right)\cdot\left(A + N_u\right)\cdot\left(3\cdot A^2 + N_u{}^2\right)\right]}}{2\cdot A^2} = 0.372457$$

$$Num := \frac{A^2 + N_u{}^2 - \sqrt{\left[\left(N_u - A\right)\cdot\left(A + N_u\right)\cdot\left(3\cdot A^2 + N_u{}^2\right)\right]}}{\sqrt{\left[A^2 + N_u{}^2 - \sqrt{\left[\left(N_u - A\right)\cdot\left(A + N_u\right)\cdot\left(3\cdot A^2 + N_u{}^2\right)\right]}\right]^2}}$$

$$Den := \frac{2\cdot A^2}{\sqrt{\left(2\cdot A^2\right)^2}}$$

$$L := \frac{Num}{Den}$$

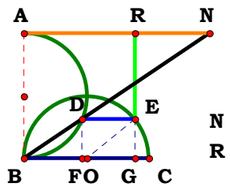
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{A^4}\cdot\left[A^2 - \sqrt{-\left(A + N_u\right)\cdot\left(3\cdot A^2 + N_u{}^2\right)\cdot\left(A - N_u\right)} + N_u{}^2\right]}{A^2\cdot\sqrt{\left[A^2 - \sqrt{-\left(A + N_u\right)\cdot\left(3\cdot A^2 + N_u{}^2\right)\cdot\left(A - N_u\right)} + N_u{}^2\right]^2}} = 1$$

$$L - \frac{\sqrt{A^4}\cdot\left[A^2 - \sqrt{-\left(A + N_u\right)\cdot\left(3\cdot A^2 + N_u{}^2\right)\cdot\left(A - N_u\right)} + N_u{}^2\right]}{A^2\cdot\sqrt{\left[A^2 - \sqrt{-\left(A + N_u\right)\cdot\left(3\cdot A^2 + N_u{}^2\right)\cdot\left(A - N_u\right)} + N_u{}^2\right]^2}} = 0$$

3OBT10BR2



N = 1.48485
R = 0.89068

Unit. $AB := 1$ Given. $N := 1.48485$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}}{2 \cdot \left(A^2 + N_u{}^2\right)} = 0.890685$$

$$Num := \frac{A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}}{\sqrt{\left(A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}\right)^2}}$$

$$Den := \frac{2 \cdot \left(A^2 + N_u{}^2\right)}{\sqrt{\left[2 \cdot \left(A^2 + N_u{}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

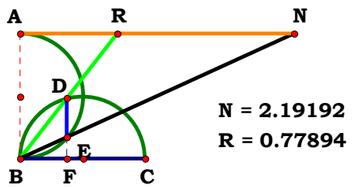
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{\left(2 \cdot A^2 + 2 \cdot N_u{}^2\right)^2} \cdot \left(A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}\right)}{2 \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{\left(A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}\right)^2}} = 1$$

$$L - \frac{\sqrt{\left(2 \cdot A^2 + 2 \cdot N_u{}^2\right)^2} \cdot \left(A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}\right)}{2 \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{\left(A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}\right)^2}} = 0$$

3OBT10BR3



Unit. $AB := 1$ Given. $N := 2.19192$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{\sqrt{A}\cdot N_u}{\sqrt{N_u\cdot\left(A^2 - A\cdot N_u + {N_u}^2\right)}} = 0.778938$$

$$Num := \frac{\sqrt{A}\cdot N_u}{\sqrt{\left(\sqrt{A}\cdot N_u\right)^2}}$$

$$Den := \frac{\sqrt{N_u\cdot\left(A^2 - A\cdot N_u + {N_u}^2\right)}}{\sqrt{\left[\sqrt{N_u\cdot\left(A^2 - A\cdot N_u + {N_u}^2\right)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

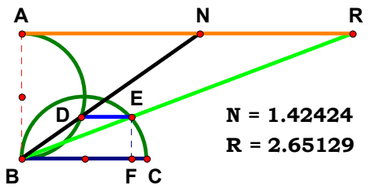
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{A}\cdot N_u}{\sqrt{A\cdot {N_u}^2}} = 1$$

$$L - \frac{\sqrt{A}\cdot N_u}{\sqrt{A\cdot {N_u}^2}} = 0$$

3OBT10BR4



N = 1.42424
R = 2.65129

Unit. $AB := 1$ Given. $N := 1.42424$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}}{2 \cdot A^2} = 2.651284$$

$$Num := \frac{A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}}{\sqrt{\left(A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}\right)^2}}$$

$$Den := \frac{2 \cdot A^2}{\sqrt{\left(2 \cdot A^2\right)^2}}$$

$$L := \frac{Num}{Den}$$

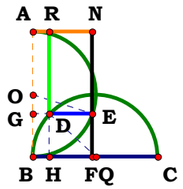
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{A^4} \cdot \left(A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}\right)}{A^2 \cdot \sqrt{\left(A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}\right)^2}} = 1$$

$$L - \frac{\sqrt{A^4} \cdot \left(A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}\right)}{A^2 \cdot \sqrt{\left(A^2 + N_u{}^2 + \sqrt{2 \cdot A^2 \cdot N_u{}^2 - 3 \cdot A^4 + N_u{}^4}\right)^2}} = 0$$

3OBT10CR0



N = 0.47475
R = 0.13630

Unit. $AB := 1$ Given. $N := .47475$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}}{2 \cdot A} = 0.136309$$

$$Num := \frac{A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}}{\sqrt{\left(A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right)^2}} \qquad Den := \frac{2 \cdot A}{\sqrt{(2 \cdot A)^2}} \qquad L := \frac{Num}{Den}$$

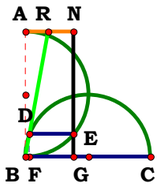
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{A^2} \cdot \left(A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right)}{A \cdot \sqrt{\left(A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right)^2}} = 1$$

$$L - \frac{\sqrt{A^2} \cdot \left(A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right)}{A \cdot \sqrt{\left(A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right)^2}} = 0$$

3OBT10CR1



N = 0.38384
R = 0.18578

Unit. $AB := 1$ Given. $N := .38384$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}}{A - \sqrt{A^2 - 4 \cdot N_u^2}} = 0.185782$$

$$Num := \frac{A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}}{\sqrt{\left(A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right)^2}}$$

$$Den := \frac{A - \sqrt{A^2 - 4 \cdot N_u^2}}{\sqrt{\left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right)^2}} \qquad L := \frac{Num}{Den}$$

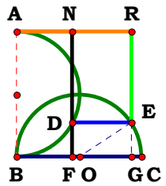
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\left(A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right) \cdot \sqrt{\left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right)^2}}{\left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right) \cdot \sqrt{\left(A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right)^2}} = 1$$

$$L - \frac{\left(A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right) \cdot \sqrt{\left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right)^2}}{\left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right) \cdot \sqrt{\left(A - \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right)^2}} = 0$$

3OBT10CR2



N = 0.44444
R = 0.92023

Unit. $AB := 1$ Given. $N := .44444$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A+\sqrt{2\cdot A\cdot\sqrt{A^2-4\cdot N_u{}^2}-A^2+4\cdot N_u{}^2}}{2\cdot A}=0.920234$$

$$Num := \frac{A+\sqrt{2\cdot A\cdot\sqrt{A^2-4\cdot N_u{}^2}-A^2+4\cdot N_u{}^2}}{\sqrt{\left(A+\sqrt{2\cdot A\cdot\sqrt{A^2-4\cdot N_u{}^2}-A^2+4\cdot N_u{}^2}\right)^2}}$$

$$Den := \frac{2\cdot A}{\sqrt{(2\cdot A)^2}}$$

$$L := \frac{Num}{Den}$$

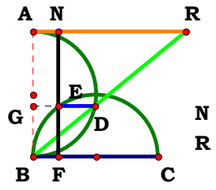
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\left(A+\sqrt{2\cdot A\cdot\sqrt{A^2-4\cdot N_u{}^2}-A^2+4\cdot N_u{}^2}\right)\cdot\sqrt{A^2}}{A\cdot\sqrt{\left(A+\sqrt{2\cdot A\cdot\sqrt{A^2-4\cdot N_u{}^2}-A^2+4\cdot N_u{}^2}\right)^2}}=1$$

$$L-\frac{\left(A+\sqrt{2\cdot A\cdot\sqrt{A^2-4\cdot N_u{}^2}-A^2+4\cdot N_u{}^2}\right)\cdot\sqrt{A^2}}{A\cdot\sqrt{\left(A+\sqrt{2\cdot A\cdot\sqrt{A^2-4\cdot N_u{}^2}-A^2+4\cdot N_u{}^2}\right)^2}}=0$$

3OBT10CR3



N = 0.20202
R = 1.22091

Unit. $AB := 1$ Given. $N := .20202$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{\sqrt{N_u^2 - A \cdot N_u + A \cdot \sqrt{N_u \cdot (A - N_u)}}}{\sqrt{N_u \cdot (A - N_u)}} = 1.220908$$

$$Num := \frac{\sqrt{N_u^2 - A \cdot N_u + A \cdot \sqrt{N_u \cdot (A - N_u)}}}{\sqrt{\left[\sqrt{N_u^2 - A \cdot N_u + A \cdot \sqrt{N_u \cdot (A - N_u)}}\right]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot (A - N_u)}}{\sqrt{\left[\sqrt{N_u \cdot (A - N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

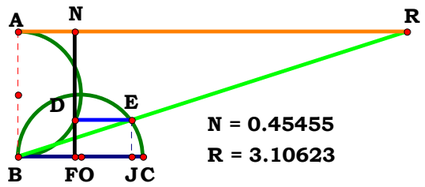
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$1 = 1$

$L - 1 = 0$

3OBT10CR4



Unit. $AB := 1$ Given. $N := .45455$

$N_u := 3$ $A := \frac{N_u}{N}$

Descriptions.

$$\frac{A + \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}}{A - \sqrt{A^2 - 4 \cdot N_u^2}} = 3.106103$$

$$Num := \frac{A + \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}}{\sqrt{\left(A + \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right)^2}}$$

$$Den := \frac{A - \sqrt{A^2 - 4 \cdot N_u^2}}{\sqrt{\left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right)^2}}$$

$$L := \frac{Num}{Den}$$

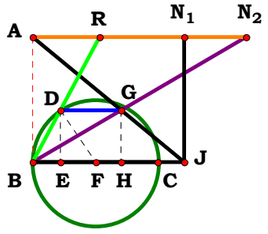
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\left(A + \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right) \cdot \sqrt{\left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right)^2}}{\left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right) \cdot \sqrt{\left(A + \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right)^2}} = 1$$

$$L - \frac{\left(A + \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right) \cdot \sqrt{\left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right)^2}}{\left(A - \sqrt{A^2 - 4 \cdot N_u^2}\right) \cdot \sqrt{\left(A + \sqrt{2 \cdot A \cdot \sqrt{A^2 - 4 \cdot N_u^2} - A^2 + 4 \cdot N_u^2}\right)^2}} = 0$$

3OBT11R0



$N_1 = 1.21212$
$N_2 = 1.70707$
$R = 0.53333$

Unit. $AB := 1$ Given. $N_1 := 1.21212$ $N_2 := 1.70707$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A + B - \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}}{2 \cdot B} = 0.533333$$

$$Num := \frac{A + B - \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}}{\sqrt{\left(A + B - \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}\right)^2}}$$

$$Den := \frac{2 \cdot B}{\sqrt{(2 \cdot B)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2} \cdot \left(A + B - \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}\right)}{B \cdot \sqrt{\left(A + B - \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}\right)^2}} = 0$$

For 2 variables there are 4 subsets.

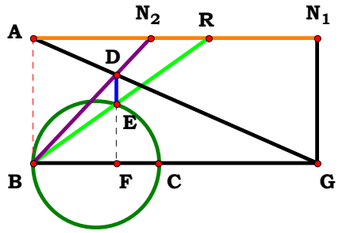
0, 0: 1

1, 0: $$\frac{A-\sqrt{A^2+2\cdot A-3}+1}{\sqrt{\left(A-\sqrt{A^2+2\cdot A-3}+1\right)^2}}$$

0, 2: $$\frac{\sqrt{B^2}\cdot\left(B-\sqrt{-3\cdot B^2+2\cdot B+1}+1\right)}{B\cdot\sqrt{\left(B-\sqrt{-3\cdot B^2+2\cdot B+1}+1\right)^2}}$$

1, 2: $$\frac{\sqrt{B^2}\cdot\left(A+B-\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}\right)}{B\cdot\sqrt{\left(A+B-\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}\right)^2}}$$

3OBT11R1



$N_1 = 2.27273$

$N_2 = 0.93939$

$R = 1.40787$

Unit. $AB := 1$ **Given.** $N_1 := 2.27273$ $N_2 := .93939$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u}{\sqrt{N_u \cdot (A + B - N_u)}} = 1.407864$$

$$Num := \frac{N_u}{\sqrt{(N_u)^2}}$$

$$Den := \frac{\sqrt{N_u \cdot (A + B - N_u)}}{\sqrt{\left[\sqrt{N_u \cdot (A + B - N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

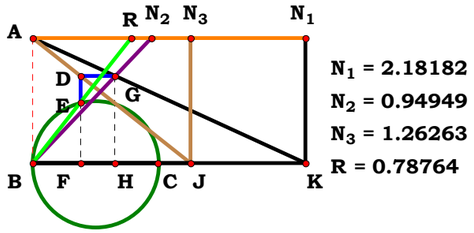
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{N_u}{\sqrt{N_u{}^2}} = 1$$

$$L - \frac{N_u}{\sqrt{N_u{}^2}} = 0$$

3OBT11R2



Unit. $AB := 1$ Given. $N_1 := 2.18182$ $N_2 := .94949$ $N_3 := 1.26263$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A}\cdot N_u}{\sqrt{N_u\cdot(A\cdot C+B\cdot C-A\cdot N_u)}} = 0.787641$$

$$Num := \frac{\sqrt{A}\cdot N_u}{\sqrt{\left(\sqrt{A}\cdot N_u\right)^2}}$$

$$Den := \frac{\sqrt{N_u\cdot(A\cdot C+B\cdot C-A\cdot N_u)}}{\sqrt{\left[\sqrt{N_u\cdot(A\cdot C+B\cdot C-A\cdot N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

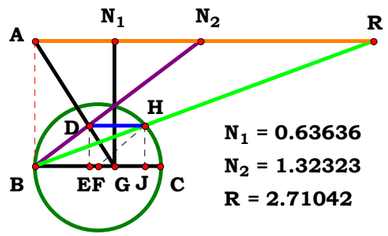
Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$\frac{\sqrt{A}\cdot N_u}{\sqrt{A\cdot N_u{}^2}} = 1$$

$$L - \frac{\sqrt{A}\cdot N_u}{\sqrt{A\cdot N_u{}^2}} = 0$$

3OBT11R3



Unit. $AB := 1$ Given. $N_1 := .63636$ $N_2 := 1.32323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A + B + \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}}{2 \cdot B} = 2.710428$$

$$Num := \frac{A + B + \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}}{\sqrt{\left(A + B + \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}\right)^2}}$$

$$Den := \frac{2 \cdot B}{\sqrt{(2 \cdot B)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2} \cdot \left(A + B + \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}\right)}{B \cdot \sqrt{\left(A + B + \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}\right)^2}} = 0$$

For 2 variables there are 4 subsets.

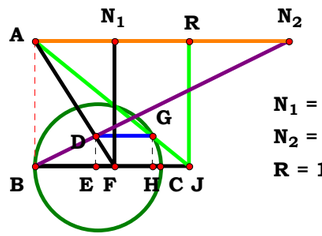
0, 0: 1

1, 0: $$\frac{A+\sqrt{A^2+2\cdot A-3}+1}{\sqrt{\left(A+\sqrt{A^2+2\cdot A-3}+1\right)^2}}$$

0, 2: $$\frac{\sqrt{B^2}\cdot\left(B+\sqrt{2\cdot B-3\cdot B^2+1}+1\right)}{B\cdot\sqrt{\left(B+\sqrt{2\cdot B-3\cdot B^2+1}+1\right)^2}}$$

1, 2: $$\frac{\sqrt{B^2}\cdot\left(A+B+\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}\right)}{B\cdot\sqrt{\left(A+B+\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}\right)^2}}$$

3OBT11R4



$N_1 = 0.63636$
$N_2 = 2.03030$
$R = 1.23381$

Unit. $AB := 1$ Given. $N_1 := .63636$ $N_2 := 2.03030$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A+B+\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}}{2\cdot A} = 1.233809$$

$$Num := \frac{A+B+\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}}{\sqrt{\left(A+B+\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}\right)^2}}$$

$$Den := \frac{2\cdot A}{\sqrt{(2\cdot A)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A^2}\cdot\left(A+B+\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}\right)}{A\cdot\sqrt{\left(A+B+\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}\right)^2}} = 0$$

For 2 variables there are 4 subsets.

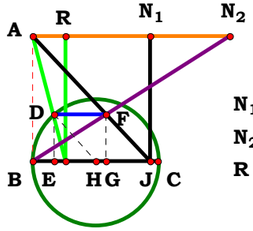
0, 0: 1

1, 0: $$\frac{\sqrt{A^2}\cdot\left(A+\sqrt{A^2+2\cdot A-3}+1\right)}{A\cdot\sqrt{\left(A+\sqrt{A^2+2\cdot A-3}+1\right)^2}}$$

0, 2: $$\frac{B+\sqrt{2\cdot B-3\cdot B^2+1}+1}{\sqrt{\left(B+\sqrt{2\cdot B-3\cdot B^2+1}+1\right)^2}}$$

1, 2: $$\frac{\sqrt{A^2}\cdot\left(A+B+\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}\right)}{A\cdot\sqrt{\left(A+B+\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}\right)^2}}$$

3OBT11R5



$N_1 = 0.93939$

$N_2 = 1.57576$

$R = 0.26749$

Unit. $AB := 1$ Given. $N_1 := .93939$ $N_2 := 1.57576$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A + B - \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}}{2 \cdot A} = 0.267482$$

$$Num := \frac{A + B - \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}}{\sqrt{\left(A + B - \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}\right)^2}}$$

$$Den := \frac{2 \cdot A}{\sqrt{(2 \cdot A)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A^2} \cdot \left(A + B - \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}\right)}{A \cdot \sqrt{\left(A + B - \sqrt{A^2 + 2 \cdot A \cdot B - 3 \cdot B^2}\right)^2}} = 0$$

For 2 variables there are 4 subsets.

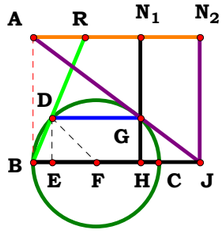
0, 0: 1

1, 0: $$\frac{\sqrt{A^2}\cdot\left(A-\sqrt{A^2+2\cdot A-3}+1\right)}{A\cdot\sqrt{\left(A-\sqrt{A^2+2\cdot A-3}+1\right)^2}}$$

0, 2: $$\frac{B-\sqrt{-3\cdot B^2+2\cdot B+1}+1}{\sqrt{\left(B-\sqrt{-3\cdot B^2+2\cdot B+1}+1\right)^2}}$$

1, 2: $$\frac{\sqrt{A^2}\cdot\left(A+B-\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}\right)}{A\cdot\sqrt{\left(A+B-\sqrt{A^2+2\cdot A\cdot B-3\cdot B^2}\right)^2}}$$

3OBT11R6



$N_1 = 0.85859$

$N_2 = 1.33333$

$R = 0.41839$

Unit. $AB := 1$ **Given.** $N_1 := .85859$ $N_2 := 1.33333$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A - \sqrt{(2 \cdot B - A) \cdot (3 \cdot A - 2 \cdot B)}}{2 \cdot (A - B)} = 0.418381$$

$$Num := \frac{A - \sqrt{(2 \cdot B - A) \cdot (3 \cdot A - 2 \cdot B)}}{\sqrt{\left[A - \sqrt{(2 \cdot B - A) \cdot (3 \cdot A - 2 \cdot B)}\right]^2}}$$

$$Den := \frac{2 \cdot (A - B)}{\sqrt{[2 \cdot (A - B)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[A - \sqrt{-(3 \cdot A - 2 \cdot B) \cdot (A - 2 \cdot B)}\right] \cdot \sqrt{(2 \cdot A - 2 \cdot B)^2}}{2 \cdot \sqrt{\left[A - \sqrt{-(3 \cdot A - 2 \cdot B) \cdot (A - 2 \cdot B)}\right]^2} \cdot (A - B)} = 0$$

For 2 variables there are 4 subsets.

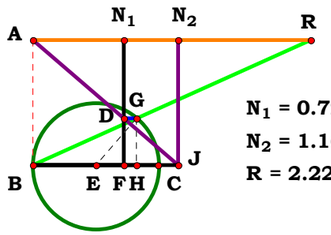
0, 0: 0

1, 0: $$\frac{\sqrt{(2\cdot A-2)^2}\cdot\left[A-\sqrt{-(A-2)\cdot(3\cdot A-2)}\right]}{2\cdot(A-1)\cdot\sqrt{\left[A-\sqrt{-(A-2)\cdot(3\cdot A-2)}\right]^2}}$$

0, 2: $$\frac{\sqrt{(2\cdot B-2)^2}\cdot\left[\sqrt{-(2\cdot B-1)\cdot(2\cdot B-3)}-1\right]}{2\cdot(B-1)\cdot\sqrt{\left[\sqrt{-(2\cdot B-1)\cdot(2\cdot B-3)}-1\right]^2}}$$

1, 2: $$\frac{\left[A-\sqrt{-(3\cdot A-2\cdot B)\cdot(A-2\cdot B)}\right]\cdot\sqrt{(2\cdot A-2\cdot B)^2}}{2\cdot\sqrt{\left[A-\sqrt{-(3\cdot A-2\cdot B)\cdot(A-2\cdot B)}\right]^2}\cdot(A-B)}$$

3OBT11R7



$N_1 = 0.72727$
$N_2 = 1.16162$
$R = 2.22498$

Unit. $AB := 1$ **Given.** $N_1 := .72727$ $N_2 := 1.16162$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A+\sqrt{(2\cdot B-A)\cdot(3\cdot A-2\cdot B)}}{2\cdot(A-B)} = 2.224936$$

$$Num := \frac{A+\sqrt{(2\cdot B-A)\cdot(3\cdot A-2\cdot B)}}{\sqrt{\left[A+\sqrt{(2\cdot B-A)\cdot(3\cdot A-2\cdot B)}\right]^2}}$$

$$Den := \frac{2\cdot(A-B)}{\sqrt{[2\cdot(A-B)]^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[A+\sqrt{-(3\cdot A-2\cdot B)\cdot(A-2\cdot B)}\right]\cdot\sqrt{(2\cdot A-2\cdot B)^2}}{2\cdot(A-B)\cdot\sqrt{\left[A+\sqrt{-(3\cdot A-2\cdot B)\cdot(A-2\cdot B)}\right]^2}} = 0$$

For 2 variables there are 4 subsets.

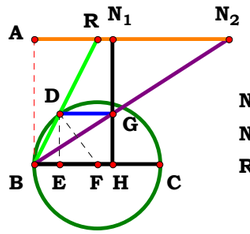
0, 0: 0

1, 0: $\dfrac{\sqrt{(2\cdot A-2)^2}\cdot\left[A+\sqrt{-(A-2)\cdot(3\cdot A-2)}\right]}{\sqrt{\left[A+\sqrt{-(A-2)\cdot(3\cdot A-2)}\right]^2}\cdot(2\cdot A-2)}$

0, 2: $-\dfrac{\sqrt{(2\cdot B-2)^2}\cdot\left[\sqrt{-(2\cdot B-1)\cdot(2\cdot B-3)}+1\right]}{\sqrt{\left[\sqrt{-(2\cdot B-1)\cdot(2\cdot B-3)}+1\right]^2}\cdot(2\cdot B-2)}$

1, 2: $\dfrac{\left[A+\sqrt{-(3\cdot A-2\cdot B)\cdot(A-2\cdot B)}\right]\cdot\sqrt{(2\cdot A-2\cdot B)^2}}{2\cdot(A-B)\cdot\sqrt{\left[A+\sqrt{-(3\cdot A-2\cdot B)\cdot(A-2\cdot B)}\right]^2}}$

3OBT11R8



$N_1 = 0.62626$
$N_2 = 1.55556$
$R = 0.50545$

Unit. $AB := 1$ **Given.** $N_1 := .62626$ $N_2 := 1.55556$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A - \sqrt{(A - 2\cdot B)\cdot(A + 2\cdot B)}}{2\cdot B} = 0.505449$$

$$Num := \frac{A - \sqrt{(A - 2\cdot B)\cdot(A + 2\cdot B)}}{\sqrt{\left[A - \sqrt{(A - 2\cdot B)\cdot(A + 2\cdot B)}\right]^2}} \qquad Den := \frac{2\cdot B}{\sqrt{(2\cdot B)^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2}\cdot\left[A - \sqrt{(A - 2\cdot B)\cdot(A + 2\cdot B)}\right]}{B\cdot\sqrt{\left[A - \sqrt{(A - 2\cdot B)\cdot(A + 2\cdot B)}\right]^2}} = 0$$

For 2 variables there are 4 subsets.

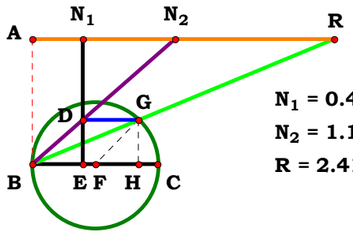
0, 0: $$-\frac{-1+\sqrt{3}\cdot i}{\sqrt{\left(-1+\sqrt{3}\cdot i\right)^2}}$$

1, 0: $$\frac{A-\sqrt{(A-2)\cdot(A+2)}}{\sqrt{\left[A-\sqrt{(A-2)\cdot(A+2)}\right]^2}}$$

0, 2: $$-\frac{\left[\sqrt{-(2\cdot B-1)\cdot(2\cdot B+1)}-1\right]\cdot\sqrt{B^2}}{B\cdot\sqrt{\left[\sqrt{-(2\cdot B-1)\cdot(2\cdot B+1)}-1\right]^2}}$$

1, 2: $$\frac{\sqrt{B^2}\cdot\left[A-\sqrt{(A-2\cdot B)\cdot(A+2\cdot B)}\right]}{B\cdot\sqrt{\left[A-\sqrt{(A-2\cdot B)\cdot(A+2\cdot B)}\right]^2}}$$

3OBT11R9



$N_1 = 0.40404$
$N_2 = 1.14141$
$R = 2.41008$

Unit. $AB := 1$ Given. $N_1 := .40404$ $N_2 := 1.14141$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{A+\sqrt{A^2-4\cdot B^2}}{2\cdot B} = 2.410066$$

$$Num := \frac{A+\sqrt{A^2-4\cdot B^2}}{\sqrt{\left(A+\sqrt{A^2-4\cdot B^2}\right)^2}}$$

$$Den := \frac{2\cdot B}{\sqrt{(2\cdot B)^2}}$$

$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left(A+\sqrt{A^2-4\cdot B^2}\right)\cdot\sqrt{B^2}}{B\cdot\sqrt{\left(A+\sqrt{A^2-4\cdot B^2}\right)^2}} = 0$$

For 2 variables there are 4 subsets.

0, 0: $$\frac{1+\sqrt{3}\cdot i}{\sqrt{\left(1+\sqrt{3}\cdot i\right)^2}}$$

1, 0: $$\frac{A+\sqrt{A^2-4}}{\sqrt{\left(A+\sqrt{A^2-4}\right)^2}}$$

0, 2: $$\frac{\left(\sqrt{1-4\cdot B^2}+1\right)\cdot\sqrt{B^2}}{B\cdot\sqrt{\left(\sqrt{1-4\cdot B^2}+1\right)^2}}$$

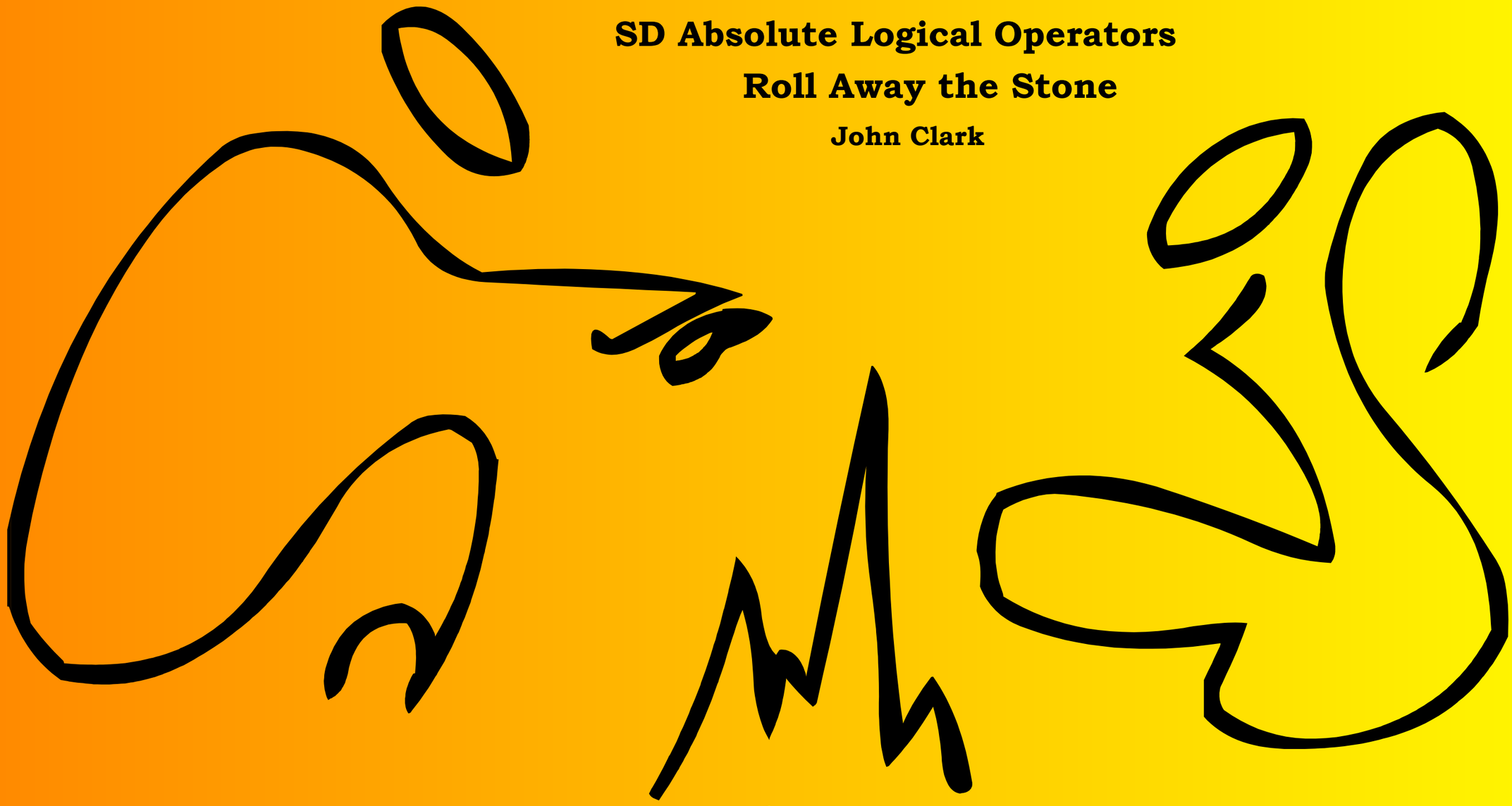
1, 2: $$\frac{\left(A+\sqrt{A^2-4\cdot B^2}\right)\cdot\sqrt{B^2}}{B\cdot\sqrt{\left(A+\sqrt{A^2-4\cdot B^2}\right)^2}}$$

Basic Analog Grammar

SD Absolute Logical Operators

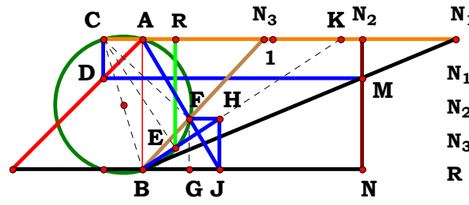
Roll Away the Stone

John Clark



John 312

4RST1AB1R0



$N_1 = 2.39948$
$N_2 = 1.68273$
$N_3 = 0.93197$
$R = 0.25102$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.68273$ $N_3 := .93197$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)}{B^2 \cdot {N_u}^4 + 3 \cdot B^2 \cdot C^2 \cdot {N_u}^2 - 2 \cdot N_u \cdot B \cdot C^3 \cdot (A - B) + C^4 \cdot \left(A^2 - 2 \cdot A \cdot B + 2 \cdot B^2\right)} = 0.251022$$

$$Num := \frac{B \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)}{\sqrt{\left[B \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)\right]^2}}$$

$$Den := \frac{B^2 \cdot {N_u}^4 + 3 \cdot B^2 \cdot C^2 \cdot {N_u}^2 - 2 \cdot N_u \cdot B \cdot C^3 \cdot (A - B) + C^4 \cdot \left(A^2 - 2 \cdot A \cdot B + 2 \cdot B^2\right)}{\sqrt{\left[B^2 \cdot {N_u}^4 + 3 \cdot B^2 \cdot C^2 \cdot {N_u}^2 - 2 \cdot N_u \cdot B \cdot C^3 \cdot (A - B) + C^4 \cdot \left(A^2 - 2 \cdot A \cdot B + 2 \cdot B^2\right)\right]^2}}$$

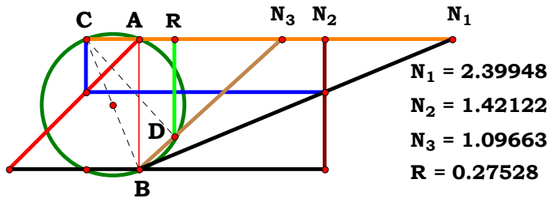
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot \sqrt{\left[B^2 \cdot {N_u}^4 + C^4 \cdot \left(A^2 - 2 \cdot A \cdot B + 2 \cdot B^2\right) + 3 \cdot B^2 \cdot C^2 \cdot {N_u}^2 - 2 \cdot B \cdot C^3 \cdot N_u \cdot (A - B)\right]^2} \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)}{\left[B^2 \cdot {N_u}^4 + C^4 \cdot \left(A^2 - 2 \cdot A \cdot B + 2 \cdot B^2\right) + 3 \cdot B^2 \cdot C^2 \cdot {N_u}^2 - 2 \cdot B \cdot C^3 \cdot N_u \cdot (A - B)\right] \cdot \sqrt{B^2 \cdot {N_u}^2 \cdot \left(C^2 + {N_u}^2\right)^2 \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)^2}} = 0$$

4RST1AB1R1



Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := 1.09663$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (B \cdot C + A \cdot N_u - B \cdot N_u)}{B \cdot (C^2 + N_u{}^2)} = 0.275282$$

$$Num := \frac{N_u \cdot (B \cdot C + A \cdot N_u - B \cdot N_u)}{\sqrt{[N_u \cdot (B \cdot C + A \cdot N_u - B \cdot N_u)]^2}}$$

$$Den := \frac{B \cdot (C^2 + N_u{}^2)}{\sqrt{[B \cdot (C^2 + N_u{}^2)]^2}}$$

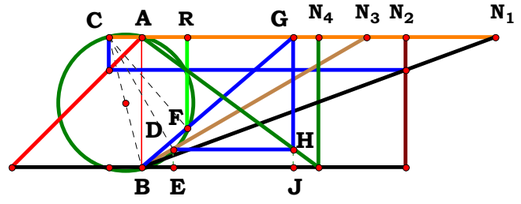
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot (C^2 + N_u{}^2)^2} \cdot (B \cdot C + A \cdot N_u - B \cdot N_u)}{B \cdot (C^2 + N_u{}^2) \cdot \sqrt{N_u{}^2 \cdot (B \cdot C + A \cdot N_u - B \cdot N_u)^2}} = 0$$

4RST1AB1R2



$N_1 = 2.70943$
$N_2 = 2.02174$
$N_3 = 1.72621$
$N_4 = 1.35578$
$R = 0.34819$

Unit. $AB := 1$ **Given.** $N_1 := 2.70943$ $N_2 := 2.02174$ $N_3 := 1.72621$

$N_4 := 1.35578$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2\cdot(A\cdot C-B\cdot C-B\cdot N_u)\cdot\left[(B^2-A\cdot B)\cdot N_u^3+N_u^2\cdot\left[C\cdot(A^2+B^2)-B^2\cdot D-2\cdot A\cdot B\cdot C\right]-B^2\cdot C^2\cdot D\right]}{B\cdot\left[B^2\cdot N_u^6+-2\cdot N_u^5\cdot B\cdot C\cdot(A-B)+N_u^4\cdot(A^2\cdot C^2-2\cdot A\cdot B\cdot C^2+B^2\cdot C^2+B^2\cdot D^2)+B^2\cdot C^2\cdot D^2\cdot(C^2+2\cdot N_u^2)\right]}=0.348194$$

$$Num := \frac{N_u^2\cdot(A\cdot C-B\cdot C-B\cdot N_u)\cdot\left[(B^2-A\cdot B)\cdot N_u^3+N_u^2\cdot\left[C\cdot(A^2+B^2)-B^2\cdot D-2\cdot A\cdot B\cdot C\right]-B^2\cdot C^2\cdot D\right]}{\sqrt{\left[N_u^2\cdot(A\cdot C-B\cdot C-B\cdot N_u)\cdot\left[(B^2-A\cdot B)\cdot N_u^3+N_u^2\cdot\left[C\cdot(A^2+B^2)-B^2\cdot D-2\cdot A\cdot B\cdot C\right]-B^2\cdot C^2\cdot D\right]\right]^2}}$$

$$Den := \frac{B\cdot\left[B^2\cdot N_u^6+-2\cdot N_u^5\cdot B\cdot C\cdot(A-B)+N_u^4\cdot(A^2\cdot C^2-2\cdot A\cdot B\cdot C^2+B^2\cdot C^2+B^2\cdot D^2)+B^2\cdot C^2\cdot D^2\cdot(C^2+2\cdot N_u^2)\right]}{\sqrt{\left[B\cdot\left[B^2\cdot N_u^6+-2\cdot N_u^5\cdot B\cdot C\cdot(A-B)+N_u^4\cdot(A^2\cdot C^2-2\cdot A\cdot B\cdot C^2+B^2\cdot C^2+B^2\cdot D^2)+B^2\cdot C^2\cdot D^2\cdot(C^2+2\cdot N_u^2)\right]\right]^2}}$$

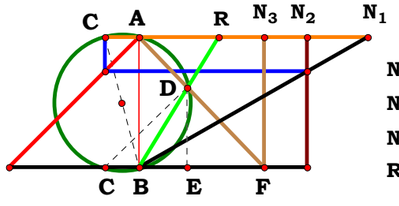
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{N_u^2\cdot\sqrt{B^2\cdot\left[B^2\cdot N_u^6+N_u^4\cdot(A^2\cdot C^2-2\cdot A\cdot B\cdot C^2+B^2\cdot C^2+B^2\cdot D^2)\ \ldots\ +B^2\cdot C^2\cdot D^2\cdot(C^2+2\cdot N_u^2)-2\cdot B\cdot C\cdot N_u^5\cdot(A-B)\right]^2}\cdot\left[N_u^2\cdot\left[B^2\cdot D-C\cdot(A^2+B^2)+2\cdot A\cdot B\cdot C\right]-N_u^3\cdot(B^2-A\cdot B)+B^2\cdot C^2\cdot D\right]\cdot(B\cdot C-A\cdot C+B\cdot N_u)}{B\cdot\sqrt{N_u^4\cdot\left[N_u^2\cdot\left[B^2\cdot D-C\cdot(A^2+B^2)+2\cdot A\cdot B\cdot C\right]-N_u^3\cdot(B^2-A\cdot B)+B^2\cdot C^2\cdot D\right]^2\cdot(B\cdot C-A\cdot C+B\cdot N_u)^2}\cdot\left[B^2\cdot N_u^6+N_u^4\cdot(A^2\cdot C^2-2\cdot A\cdot B\cdot C^2+B^2\cdot C^2+B^2\cdot D^2)\ \ldots\ +B^2\cdot C^2\cdot D^2\cdot(C^2+2\cdot N_u^2)-2\cdot B\cdot C\cdot N_u^5\cdot(A-B)\right]}=0$$

4RST1AB1R3



$N_1 = 1.75053$
$N_2 = 1.28562$
$N_3 = 0.96103$
$R = 0.60717$

Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := 1.28562$ $N_3 := .96103$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{B \cdot C + N_u \cdot (A - B)}{C \cdot (B - A) + B \cdot N_u} = 0.607174$$

$$Num := \frac{B \cdot C + N_u \cdot (A - B)}{\sqrt{\left[B \cdot C + N_u \cdot (A - B)\right]^2}}$$

$$Den := \frac{C \cdot (B - A) + B \cdot N_u}{\sqrt{\left[C \cdot (B - A) + B \cdot N_u\right]^2}}$$

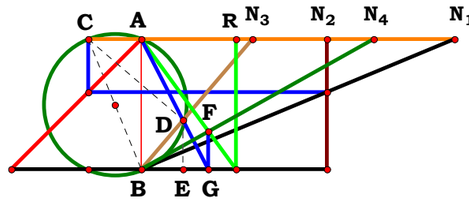
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[B \cdot C + N_u \cdot (A - B)\right] \cdot \sqrt{\left[B \cdot N_u - C \cdot (A - B)\right]^2}}{\left[B \cdot N_u - C \cdot (A - B)\right] \cdot \sqrt{\left[B \cdot C + N_u \cdot (A - B)\right]^2}} = 0$$

4RST1AB1R4



$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 0.85448$
$N_4 = 1.78196$
$R = 0.72686$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := .85448$ $N_4 := 1.78196$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right]}{B \cdot {N_u}^2 - N_u \cdot (C + D) \cdot (A - B) - B \cdot C \cdot D} = 0.726866$$

$$Num := \frac{N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right]}{\sqrt{\left[N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]^2}}$$

$$Den := \frac{B \cdot {N_u}^2 - N_u \cdot (C + D) \cdot (A - B) - B \cdot C \cdot D}{\sqrt{\left[B \cdot {N_u}^2 - N_u \cdot (C + D) \cdot (A - B) - B \cdot C \cdot D\right]^2}}$$

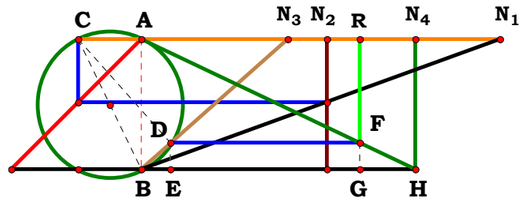
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right] \cdot \sqrt{\left[(C + D) \cdot (A - B) \cdot N_u - B \cdot {N_u}^2 + B \cdot C \cdot D\right]^2}}{\sqrt{{N_u}^2 \cdot \left[B \cdot C + N_u \cdot (A - B)\right]^2} \cdot \left[B \cdot {N_u}^2 - (C + D) \cdot (A - B) \cdot N_u - B \cdot C \cdot D\right]} = 0$$

4RST1AB1R5



$N_1 = 2.74817$
$N_2 = 1.42122$
$N_3 = 1.12569$
$N_4 = 2.10159$
$R = 1.67846$

Unit. $AB := 1$ Given. $N_1 := 2.74817$ $N_2 := 1.42122$ $N_3 := 1.12569$ $N_4 := 2.10159$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^{\,2}\cdot\left[C\cdot(B-A)+B\cdot N_u\right]}{B\cdot D\cdot\left(C^2+N_u^{\,2}\right)} = 1.678466$$

$$Num := \frac{N_u^{\,2}\cdot\left[C\cdot(B-A)+B\cdot N_u\right]}{\sqrt{\left[N_u^{\,2}\cdot\left[C\cdot(B-A)+B\cdot N_u\right]\right]^2}}$$

$$Den := \frac{B\cdot D\cdot\left(C^2+N_u^{\,2}\right)}{\sqrt{\left[B\cdot D\cdot\left(C^2+N_u^{\,2}\right)\right]^2}}$$

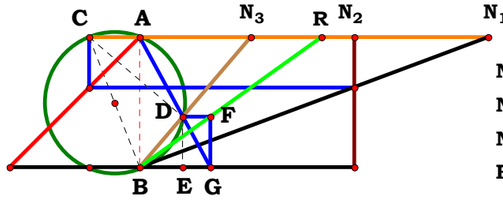
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^{\,2}\cdot\left[B\cdot N_u - C\cdot(A-B)\right]\cdot\sqrt{B^2\cdot D^2\cdot\left(C^2+N_u^{\,2}\right)^2}}{B\cdot D\cdot\left(C^2+N_u^{\,2}\right)\cdot\sqrt{N_u^{\,4}\cdot\left[B\cdot N_u - C\cdot(A-B)\right]^2}} = 0$$

4RST1AB1R6



$N_1 = 2.67068$

$N_2 = 1.64399$

$N_3 = 0.85448$

$R = 1.39650$

Unit. $AB := 1$ **Given.** $N_1 := 2.67068$ $N_2 := 1.64399$ $N_3 := .85448$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{B\cdot\left(C^2+{N_u}^2\right)}{C\cdot\left[C\cdot(B-A)+B\cdot N_u\right]} = 1.396498$$

$$Num := \frac{B\cdot\left(C^2+{N_u}^2\right)}{\sqrt{\left[B\cdot\left(C^2+{N_u}^2\right)\right]^2}}$$

$$Den := \frac{C\cdot\left[C\cdot(B-A)+B\cdot N_u\right]}{\sqrt{\left[C\cdot\left[C\cdot(B-A)+B\cdot N_u\right]\right]^2}}$$

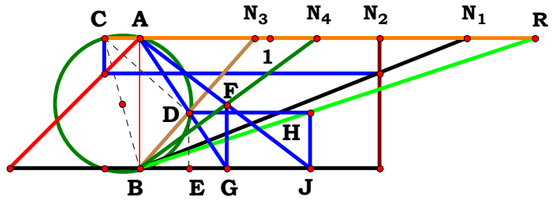
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B\cdot\left(C^2+{N_u}^2\right)\cdot\sqrt{C^2\cdot\left[B\cdot N_u - C\cdot(A-B)\right]^2}}{C\cdot\left[B\cdot N_u - C\cdot(A-B)\right]\cdot\sqrt{B^2\cdot\left(C^2+{N_u}^2\right)^2}} = 0$$

4RST1AB1R7



$N_1 = 2.50603$
$N_2 = 1.83771$
$N_3 = 0.88354$
$N_4 = 1.35578$
$R = 3.03637$

Unit. $AB := 1$ **Given.** $N_1 := 2.50603$ $N_2 := 1.83771$ $N_3 := .88354$ $N_4 := 1.35578$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{C \cdot \left[B \cdot N_u{}^2 + N_u \cdot (C + D) \cdot (B - A) - B \cdot C \cdot D\right]} = 3.03638$$

$$Num := \frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

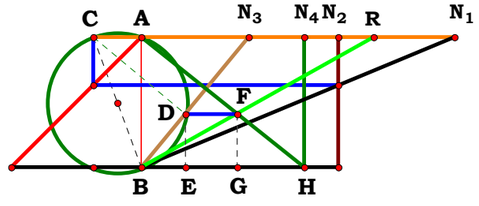
$$Den := \frac{C \cdot \left[B \cdot N_u{}^2 + N_u \cdot (C + D) \cdot (B - A) - B \cdot C \cdot D\right]}{\sqrt{\left[C \cdot \left[B \cdot N_u{}^2 + N_u \cdot (C + D) \cdot (B - A) - B \cdot C \cdot D\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \sqrt{C^2 \cdot \left[(C + D) \cdot (A - B) \cdot N_u - B \cdot N_u{}^2 + B \cdot C \cdot D\right]^2} \cdot \left(C^2 + N_u{}^2\right)}{C \cdot \left[B \cdot N_u{}^2 - B \cdot C \cdot D - (C + D) \cdot (A - B) \cdot N_u\right] \cdot \sqrt{B^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST1AB1R8



$N_1 = 2.39948$
$N_2 = 1.50839$
$N_3 = 0.82543$
$N_4 = 1.24924$
$R = 1.77959$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.50839$ $N_3 := .82543$ $N_4 := 1.24924$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2 \cdot \left[C \cdot (B - A) + B \cdot N_u\right]}{D \cdot \left[B \cdot C^2 + C \cdot N_u \cdot (A - B)\right]} = 1.779608$$

$$Num := \frac{N_u^2 \cdot \left[C \cdot (B - A) + B \cdot N_u\right]}{\sqrt{\left[N_u^2 \cdot \left[C \cdot (B - A) + B \cdot N_u\right]\right]^2}}$$

$$Den := \frac{D \cdot \left[B \cdot C^2 + C \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[D \cdot \left[B \cdot C^2 + C \cdot N_u \cdot (A - B)\right]\right]^2}}$$

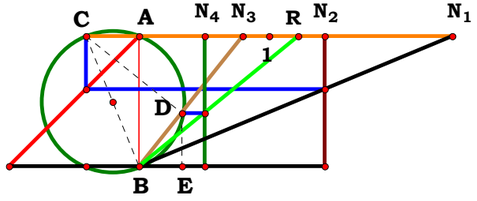
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \left[B \cdot N_u - C \cdot (A - B)\right] \cdot \sqrt{D^2 \cdot \left[B \cdot C^2 + N_u \cdot (A - B) \cdot C\right]^2}}{D \cdot \sqrt{N_u^4 \cdot \left[B \cdot N_u - C \cdot (A - B)\right]^2} \cdot \left[B \cdot C^2 + N_u \cdot (A - B) \cdot C\right]} = 0$$

4RST1AB1R9



$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 0.79637$
$N_4 = 0.50343$
$R = 1.21825$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := .79637$

$N_4 := .50343$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{D \cdot \left[B \cdot C^2 + C \cdot N_u \cdot (A - B)\right]} = 1.218244$$

$$Num := \frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{D \cdot \left[B \cdot C^2 + C \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[D \cdot \left[B \cdot C^2 + C \cdot N_u \cdot (A - B)\right]\right]^2}}$$

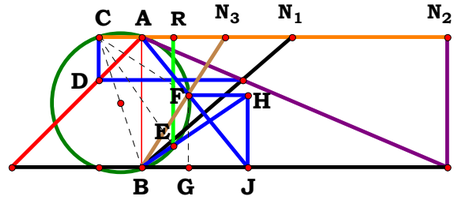
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \sqrt{D^2 \cdot \left[B \cdot C^2 + N_u \cdot (A - B) \cdot C\right]^2} \cdot \left(C^2 + N_u{}^2\right)}{D \cdot \left[B \cdot C^2 + N_u \cdot (A - B) \cdot C\right] \cdot \sqrt{B^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST1AB3R0



$N_1 = 1.15002$
$N_2 = 2.34137$
$N_3 = 0.64140$
$R = 0.24332$

Unit. $AB := 1$ Given. $N_1 := 1.15002$ $N_2 := 2.34137$ $N_3 := .64140$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A+B) \cdot \left(A \cdot C + B \cdot C - B \cdot N_u\right)}{{N_u}^2 \cdot \left(3 \cdot C^2 + {N_u}^2\right) \cdot (A+B)^2 + 2 \cdot N_u \cdot B \cdot C^3 \cdot (A+B) + C^4 \cdot \left(A^2 + 2 \cdot A \cdot B + 2 \cdot B^2\right)} = 0.24332$$

$$Num := \frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A+B) \cdot \left(A \cdot C + B \cdot C - B \cdot N_u\right)}{\sqrt{\left[N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A+B) \cdot \left(A \cdot C + B \cdot C - B \cdot N_u\right)\right]^2}}$$

$$Den := \frac{{N_u}^2 \cdot \left(3 \cdot C^2 + {N_u}^2\right) \cdot (A+B)^2 + 2 \cdot N_u \cdot B \cdot C^3 \cdot (A+B) + C^4 \cdot \left(A^2 + 2 \cdot A \cdot B + 2 \cdot B^2\right)}{\sqrt{\left[{N_u}^2 \cdot \left(3 \cdot C^2 + {N_u}^2\right) \cdot (A+B)^2 + 2 \cdot N_u \cdot B \cdot C^3 \cdot (A+B) + C^4 \cdot \left(A^2 + 2 \cdot A \cdot B + 2 \cdot B^2\right)\right]^2}}$$

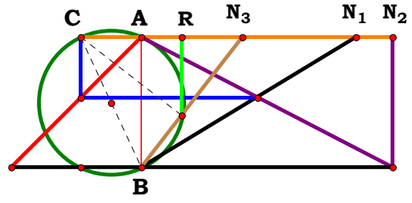
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A+B) \cdot \sqrt{\left[C^4 \cdot \left(A^2 + 2 \cdot A \cdot B + 2 \cdot B^2\right) + {N_u}^2 \cdot (A+B)^2 \cdot \left(3 \cdot C^2 + {N_u}^2\right) + 2 \cdot B \cdot C^3 \cdot N_u \cdot (A+B)\right]^2} \cdot \left(A \cdot C + B \cdot C - B \cdot N_u\right)}{\left[C^4 \cdot \left(A^2 + 2 \cdot A \cdot B + 2 \cdot B^2\right) + {N_u}^2 \cdot (A+B)^2 \cdot \left(3 \cdot C^2 + {N_u}^2\right) + 2 \cdot B \cdot C^3 \cdot N_u \cdot (A+B)\right] \cdot \sqrt{{N_u}^2 \cdot \left(C^2 + {N_u}^2\right)^2 \cdot (A+B)^2 \cdot \left(A \cdot C + B \cdot C - B \cdot N_u\right)^2}} = 0$$

4RST1AB3R1



$N_1 = 1.64399$
$N_2 = 1.92488$
$N_3 = 0.77700$
$R = 0.31108$

Unit. $AB := 1$ **Given.** $N_1 := 1.64399$ $N_2 := 1.92488$ $N_3 := .77700$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left[C \cdot (A + B) - B \cdot N_u\right]}{\left(C^2 + {N_u}^2\right) \cdot (A + B)} = 0.311084$$

$$Num := \frac{N_u \cdot \left[C \cdot (A + B) - B \cdot N_u\right]}{\sqrt{\left[N_u \cdot \left[C \cdot (A + B) - B \cdot N_u\right]\right]^2}}$$

$$Den := \frac{\left(C^2 + {N_u}^2\right) \cdot (A + B)}{\sqrt{\left[\left(C^2 + {N_u}^2\right) \cdot (A + B)\right]^2}}$$

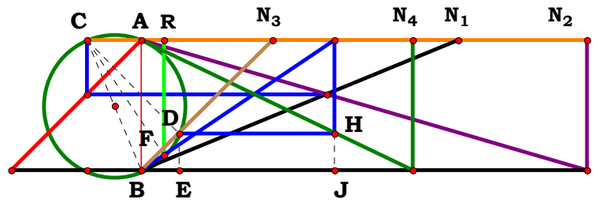
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(A \cdot C + B \cdot C - B \cdot N_u\right) \cdot \sqrt{\left(\left(C^2 + {N_u}^2\right)^2 \cdot (A + B)^2\right)}}{\sqrt{{N_u}^2 \cdot \left[C \cdot (A + B) - B \cdot N_u\right]^2} \cdot \left(\left(C^2 + {N_u}^2\right) \cdot (A + B)\right)} = 0$$

4RST1AB3R2



$N_1 = 2.42854$
$N_2 = 3.41649$
$N_3 = 1.00946$
$N_4 = 2.08221$
$R = 0.17781$

Unit. $AB := 1$ Given. $N_1 := 2.42854$ $N_2 := 3.41649$ $N_3 := 1.00946$ $N_4 := 2.08221$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2 \cdot \left[B \cdot C + N_u \cdot (A+B)\right] \cdot \left[D \cdot \left(C^2 + N_u^2\right) \cdot (A+B)^2 - \left[B \cdot N_u^2 \cdot \left(B \cdot C + A \cdot N_u + B \cdot N_u\right)\right]\right]}{(A+B) \cdot \left[D^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2 + N_u^4 \cdot \left(B \cdot C + A \cdot N_u + B \cdot N_u\right)^2\right]} = 0.177813$$

$$Num := \frac{N_u^2 \cdot \left[B \cdot C + N_u \cdot (A+B)\right] \cdot \left[D \cdot \left(C^2 + N_u^2\right) \cdot (A+B)^2 - \left[B \cdot N_u^2 \cdot \left(B \cdot C + A \cdot N_u + B \cdot N_u\right)\right]\right]}{\sqrt{\left[N_u^2 \cdot \left[B \cdot C + N_u \cdot (A+B)\right] \cdot \left[D \cdot \left(C^2 + N_u^2\right) \cdot (A+B)^2 - \left[B \cdot N_u^2 \cdot \left(B \cdot C + A \cdot N_u + B \cdot N_u\right)\right]\right]\right]^2}}$$

$$Den := \frac{(A+B) \cdot \left[D^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2 + N_u^4 \cdot \left(B \cdot C + A \cdot N_u + B \cdot N_u\right)^2\right]}{\sqrt{\left[(A+B) \cdot \left[D^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2 + N_u^4 \cdot \left(B \cdot C + A \cdot N_u + B \cdot N_u\right)^2\right]\right]^2}}$$

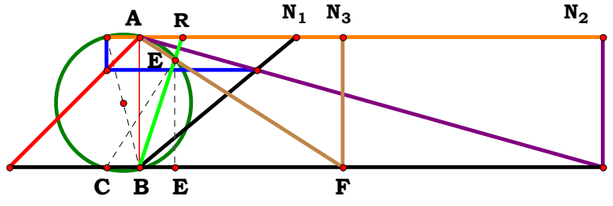
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \sqrt{\left[N_u^4 \cdot \left(B \cdot C + A \cdot N_u + B \cdot N_u\right)^2 + D^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2\right]^2 \cdot (A+B)^2} \cdot \left[N_u \cdot (A+B) + B \cdot C\right] \cdot \left[D \cdot \left(C^2 + N_u^2\right) \cdot (A+B)^2 - B \cdot N_u^2 \cdot \left(B \cdot C + A \cdot N_u + B \cdot N_u\right)\right]}{\left[N_u^4 \cdot \left(B \cdot C + A \cdot N_u + B \cdot N_u\right)^2 + D^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2\right] \cdot (A+B) \cdot \sqrt{N_u^4 \cdot \left[N_u \cdot (A+B) + B \cdot C\right]^2 \cdot \left[B \cdot N_u^2 \cdot \left(B \cdot C + A \cdot N_u + B \cdot N_u\right) - D \cdot \left(C^2 + N_u^2\right) \cdot (A+B)^2\right]^2}} = 0$$

4RST1AB3R3



$N_1 = 1.19844$
$N_2 = 3.55209$
$N_3 = 1.56155$
$R = 0.33413$

Unit. $AB := 1$ **Given.** $N_1 := 1.19844$ $N_2 := 3.55209$ $N_3 := 1.56155$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot(A+B)-B\cdot N_u}{B\cdot C+N_u\cdot(A+B)} = 0.334134$$

$$Num := \frac{C\cdot(A+B)-B\cdot N_u}{\sqrt{\left[C\cdot(A+B)-B\cdot N_u\right]^2}}$$

$$Den := \frac{B\cdot C+N_u\cdot(A+B)}{\sqrt{\left[B\cdot C+N_u\cdot(A+B)\right]^2}}$$

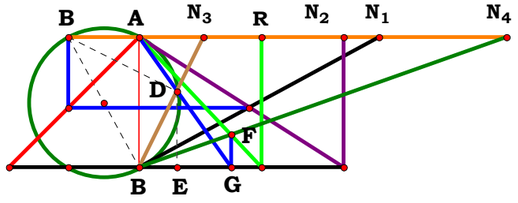
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left[N_u\cdot(A+B)+B\cdot C\right]^2}\cdot\left[C\cdot(A+B)-B\cdot N_u\right]}{\sqrt{\left[C\cdot(A+B)-B\cdot N_u\right]^2}\cdot\left[N_u\cdot(A+B)+B\cdot C\right]} = 0$$

4RST1AB3R4



$N_1 = 1.83771$
$N_2 = 1.56650$
$N_3 = 0.49611$
$N_4 = 2.81833$
$R = 0.94335$

Unit. $AB := 1$ Given. $N_1 := 1.83771$ $N_2 := 1.56650$ $N_3 := .49611$

$N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u)}{(A + B) \cdot N_u^{\,2} + N_u \cdot B \cdot (C + D) - [C \cdot D \cdot (A + B)]} = 0.94335$$

$$Num := \frac{N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u)}{\sqrt{\left[N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u)\right]^2}}$$

$$Den := \frac{(A + B) \cdot N_u^{\,2} + N_u \cdot B \cdot (C + D) - [C \cdot D \cdot (A + B)]}{\sqrt{\left[(A + B) \cdot N_u^{\,2} + N_u \cdot B \cdot (C + D) - [C \cdot D \cdot (A + B)]\right]^2}}$$

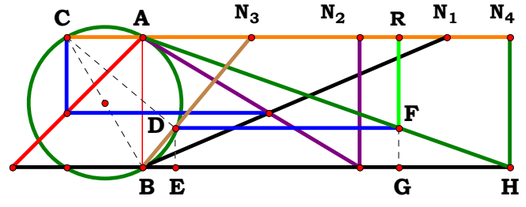
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[(A + B) \cdot N_u^{\,2} + B \cdot (C + D) \cdot N_u - C \cdot D \cdot (A + B)\right]^2} \cdot (A \cdot C + B \cdot C - B \cdot N_u)}{\sqrt{N_u^{\,2} \cdot (A \cdot C + B \cdot C - B \cdot N_u)^2 \cdot \left[(A + B) \cdot N_u^{\,2} + B \cdot (C + D) \cdot N_u - C \cdot D \cdot (A + B)\right]}} = 0$$

4RST1AB3R5



$N_1 = 2.33168$
$N_2 = 1.66336$
$N_3 = 0.83511$
$N_4 = 2.81833$
$R = 1.96724$

Unit. $AB := 1$ Given. $N_1 := 2.33168$ $N_2 := 1.66336$ $N_3 := .83511$

$N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2 \cdot [B \cdot C + N_u \cdot (A + B)]}{D \cdot (C^2 + N_u^2) \cdot (A + B)} = 1.967234$$

$$Num := \frac{N_u^2 \cdot [B \cdot C + N_u \cdot (A + B)]}{\sqrt{[N_u^2 \cdot [B \cdot C + N_u \cdot (A + B)]]^2}}$$

$$Den := \frac{D \cdot (C^2 + N_u^2) \cdot (A + B)}{\sqrt{[D \cdot (C^2 + N_u^2) \cdot (A + B)]^2}}$$

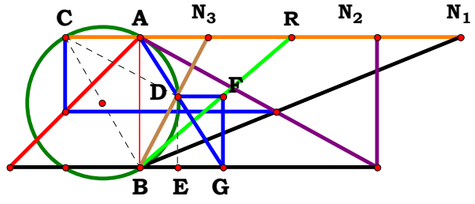
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot [N_u \cdot (A + B) + B \cdot C] \cdot \sqrt{D^2 \cdot (C^2 + N_u^2)^2 \cdot (A + B)^2}}{D \cdot \sqrt{N_u^4 \cdot [N_u \cdot (A + B) + B \cdot C]^2} \cdot (C^2 + N_u^2) \cdot (A + B)} = 0$$

4RST1AB3R6



$N_1 = 2.45760$

$N_2 = 1.81833$

$N_3 = 0.52517$

$R = 1.15990$

Unit. $AB := 1$ Given. $N_1 := 2.45760$ $N_2 := 1.81833$ $N_3 := .52517$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\left(C^2 + N_u{}^2\right)\cdot(A+B)}{C\cdot\left[B\cdot C + N_u\cdot(A+B)\right]} = 1.159903$$

$$Num := \frac{\left(C^2 + N_u{}^2\right)\cdot(A+B)}{\sqrt{\left[\left(C^2 + N_u{}^2\right)\cdot(A+B)\right]^2}}$$

$$Den := \frac{C\cdot\left[B\cdot C + N_u\cdot(A+B)\right]}{\sqrt{\left[C\cdot\left[B\cdot C + N_u\cdot(A+B)\right]\right]^2}}$$

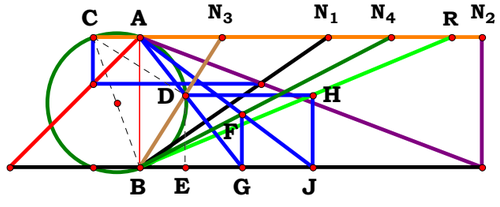
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{C^2\cdot\left[N_u\cdot(A+B) + B\cdot C\right]^2}\cdot\left(C^2 + N_u{}^2\right)\cdot(A+B)}{C\cdot\left[N_u\cdot(A+B) + B\cdot C\right]\cdot\sqrt{\left(C^2 + N_u{}^2\right)^2\cdot(A+B)^2}} = 0$$

4RST1AB3R7



$N_1 = 1.44059$
$N_2 = 2.62225$
$N_3 = 0.63171$
$N_4 = 1.92724$
$R = 2.39715$

Unit. $AB := 1$ Given. $N_1 := 1.44059$ $N_2 := 2.62225$ $N_3 := .63171$

$N_4 := 1.92724$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B)}{C \cdot \left({N_u}^2 - C \cdot D\right) \cdot (A + B) + N_u \cdot B \cdot C \cdot (C + D)} = 2.397151$$

$$Num := \frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{C \cdot \left({N_u}^2 - C \cdot D\right) \cdot (A + B) + N_u \cdot B \cdot C \cdot (C + D)}{\sqrt{\left[C \cdot \left({N_u}^2 - C \cdot D\right) \cdot (A + B) + N_u \cdot B \cdot C \cdot (C + D)\right]^2}}$$

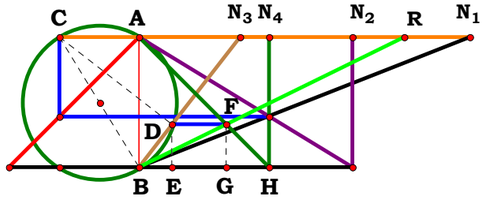
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B) \cdot \sqrt{\left[C \cdot (A + B) \cdot \left({N_u}^2 - C \cdot D\right) + B \cdot C \cdot N_u \cdot (C + D)\right]^2}}{\left[C \cdot (A + B) \cdot \left({N_u}^2 - C \cdot D\right) + B \cdot C \cdot N_u \cdot (C + D)\right] \cdot \sqrt{{N_u}^2 \cdot \left(C^2 + {N_u}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST1AB3R8



$N_1 = 2.53508$
$N_2 = 1.63430$
$N_3 = 0.77700$
$N_4 = 0.99741$
$R = 2.03456$

Unit. $AB := 1$ Given. $N_1 := 2.53508$ $N_2 := 1.63430$ $N_3 := .77700$

$N_4 := .99741$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^{\,2}\cdot\left[B\cdot C + N_u\cdot(A+B)\right]}{C\cdot D\cdot\left[C\cdot(A+B) - B\cdot N_u\right]} = 2.034581$$

$$Num := \frac{N_u^{\,2}\cdot\left[B\cdot C + N_u\cdot(A+B)\right]}{\sqrt{\left[N_u^{\,2}\cdot\left[B\cdot C + N_u\cdot(A+B)\right]\right]^2}}$$

$$Den := \frac{C\cdot D\cdot\left[C\cdot(A+B) - B\cdot N_u\right]}{\sqrt{\left[C\cdot D\cdot\left[C\cdot(A+B) - B\cdot N_u\right]\right]^2}}$$

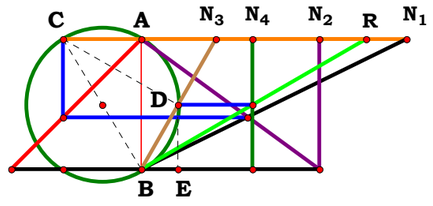
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^{\,2}\cdot\left[N_u\cdot(A+B) + B\cdot C\right]\cdot\sqrt{C^2\cdot D^2\cdot\left[C\cdot(A+B) - B\cdot N_u\right]^2}}{C\cdot D\cdot\sqrt{N_u^{\,4}\cdot\left[N_u\cdot(A+B) + B\cdot C\right]^2}\cdot\left[C\cdot(A+B) - B\cdot N_u\right]} = 0$$

4RST1AB3R9



$N_1 = 2.03142$
$N_2 = 1.36310$
$N_3 = 0.57360$
$N_4 = 0.85212$
$R = 1.72440$

Unit. $AB := 1$ **Given.** $N_1 := 2.03142$ $N_2 := 1.36310$ $N_3 := .57360$ $N_4 := .85212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{C \cdot D \cdot \left[C \cdot (A + B) - B \cdot N_u\right]} = 1.724414$$

$$Num := \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{C \cdot D \cdot \left[C \cdot (A + B) - B \cdot N_u\right]}{\sqrt{\left[C \cdot D \cdot \left[C \cdot (A + B) - B \cdot N_u\right]\right]^2}}$$

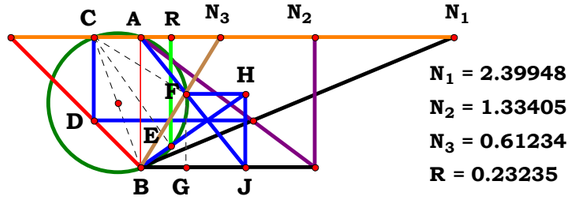
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{C^2 \cdot D^2 \cdot \left[C \cdot (A + B) - B \cdot N_u\right]^2}}{C \cdot D \cdot \left[C \cdot (A + B) - B \cdot N_u\right] \cdot \sqrt{N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST1AB4R0



$N_1 = 2.39948$
$N_2 = 1.33405$
$N_3 = 0.61234$
$R = 0.23235$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.33405$ $N_3 := .61234$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A+B) \cdot \left[C \cdot (A+B) - A \cdot N_u\right]}{{N_u}^2 \cdot \left(3 \cdot C^2 + {N_u}^2\right) \cdot (A+B)^2 + 2 \cdot N_u \cdot A \cdot C^3 \cdot (A+B) + C^4 \cdot \left(2 \cdot A^2 + 2 \cdot A \cdot B + B^2\right)} = 0.232351$$

$$Num := \frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A+B) \cdot \left[C \cdot (A+B) - A \cdot N_u\right]}{\sqrt{\left[N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A+B) \cdot \left[C \cdot (A+B) - A \cdot N_u\right]\right]^2}}$$

$$Den := \frac{{N_u}^2 \cdot \left(3 \cdot C^2 + {N_u}^2\right) \cdot (A+B)^2 + 2 \cdot N_u \cdot A \cdot C^3 \cdot (A+B) + C^4 \cdot \left(2 \cdot A^2 + 2 \cdot A \cdot B + B^2\right)}{\sqrt{\left[{N_u}^2 \cdot \left(3 \cdot C^2 + {N_u}^2\right) \cdot (A+B)^2 + 2 \cdot N_u \cdot A \cdot C^3 \cdot (A+B) + C^4 \cdot \left(2 \cdot A^2 + 2 \cdot A \cdot B + B^2\right)\right]^2}}$$

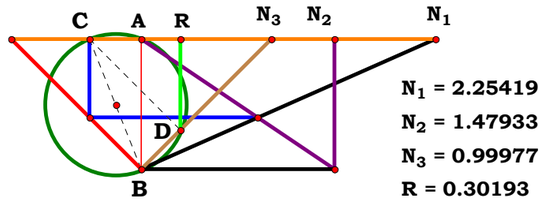
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A+B) \cdot \sqrt{\left[C^4 \cdot \left(2 \cdot A^2 + 2 \cdot A \cdot B + B^2\right) + {N_u}^2 \cdot (A+B)^2 \cdot \left(3 \cdot C^2 + {N_u}^2\right) + 2 \cdot A \cdot C^3 \cdot N_u \cdot (A+B)\right]^2} \cdot \left[C \cdot (A+B) - A \cdot N_u\right]}{\left[C^4 \cdot \left(2 \cdot A^2 + 2 \cdot A \cdot B + B^2\right) + {N_u}^2 \cdot (A+B)^2 \cdot \left(3 \cdot C^2 + {N_u}^2\right) + 2 \cdot A \cdot C^3 \cdot N_u \cdot (A+B)\right] \cdot \sqrt{{N_u}^2 \cdot \left(C^2 + {N_u}^2\right)^2 \cdot (A+B)^2 \cdot \left[C \cdot (A+B) - A \cdot N_u\right]^2}} = 0$$

4RST1AB4R1



$N_1 = 2.25419$
$N_2 = 1.47933$
$N_3 = 0.99977$
R = 0.30193

Unit. $AB := 1$ Given. $N_1 := 2.25419$ $N_2 := 1.47933$ $N_3 := .99977$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left[C \cdot (A + B) - A \cdot N_u\right]}{\left(C^2 + {N_u}^2\right) \cdot (A + B)} = 0.301931$$

$$Num := \frac{N_u \cdot \left[C \cdot (A + B) - A \cdot N_u\right]}{\sqrt{\left[N_u \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]^2}}$$

$$Den := \frac{\left(C^2 + {N_u}^2\right) \cdot (A + B)}{\sqrt{\left[\left(C^2 + {N_u}^2\right) \cdot (A + B)\right]^2}}$$

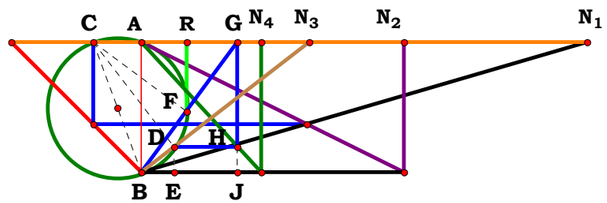
$$L := \frac{Num}{Den}$$

Definitions.

Num = 1 Den = 1 L = 1

$$L - \frac{N_u \cdot \left[C \cdot (A + B) - A \cdot N_u\right] \cdot \sqrt{\left(C^2 + {N_u}^2\right)^2 \cdot (A + B)^2}}{\sqrt{{N_u}^2 \cdot \left[C \cdot (A + B) - A \cdot N_u\right]^2} \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B)} = 0$$

4RST1AB4R2



$N_1 = 3.41649$
$N_2 = 2.01205$
$N_3 = 1.29034$
$N_4 = 0.91992$
$R = 0.34702$

Unit. $AB := 1$ Given. $N_1 := 3.41649$ $N_2 := 2.01205$ $N_3 := 1.29034$

$N_4 := .91992$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2 \cdot [A \cdot C + N_u \cdot (A+B)] \cdot \left[D \cdot \left(C^2 + N_u^2\right) \cdot (A+B)^2 - \left[A \cdot N_u^2 \cdot \left(A \cdot C + A \cdot N_u + B \cdot N_u\right)\right]\right]}{\left[D^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2 + N_u^4 \cdot \left(A \cdot C + A \cdot N_u + B \cdot N_u\right)^2\right] \cdot (A+B)} = 0.347019$$

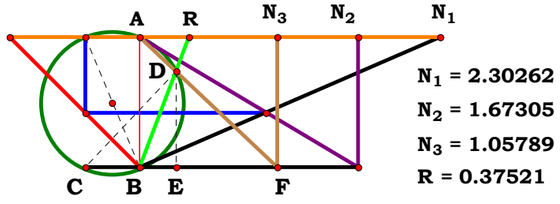
$$Num := \frac{N_u^2 \cdot [A \cdot C + N_u \cdot (A+B)] \cdot \left[D \cdot \left(C^2 + N_u^2\right) \cdot (A+B)^2 - \left[A \cdot N_u^2 \cdot \left(A \cdot C + A \cdot N_u + B \cdot N_u\right)\right]\right]}{\sqrt{\left[N_u^2 \cdot [A \cdot C + N_u \cdot (A+B)] \cdot \left[D \cdot \left(C^2 + N_u^2\right) \cdot (A+B)^2 - \left[A \cdot N_u^2 \cdot \left(A \cdot C + A \cdot N_u + B \cdot N_u\right)\right]\right]\right]^2}}$$

$$Den := \frac{\left[D^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2 + N_u^4 \cdot \left(A \cdot C + A \cdot N_u + B \cdot N_u\right)^2\right] \cdot (A+B)}{\sqrt{\left[\left[D^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2 + N_u^4 \cdot \left(A \cdot C + A \cdot N_u + B \cdot N_u\right)^2\right] \cdot (A+B)\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - -\frac{N_u^2 \cdot \sqrt{\left[N_u^4 \cdot \left(A \cdot C + A \cdot N_u + B \cdot N_u\right)^2 + D^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2\right]^2 \cdot (A+B)^2} \cdot [N_u \cdot (A+B) + A \cdot C] \cdot \left[A \cdot N_u^2 \cdot \left(A \cdot C + A \cdot N_u + B \cdot N_u\right) - D \cdot \left(C^2 + N_u^2\right) \cdot (A+B)^2\right]}{\left[N_u^4 \cdot \left(A \cdot C + A \cdot N_u + B \cdot N_u\right)^2 + D^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2\right] \cdot (A+B) \cdot \sqrt{N_u^4 \cdot [N_u \cdot (A+B) + A \cdot C]^2 \cdot \left[A \cdot N_u^2 \cdot \left(A \cdot C + A \cdot N_u + B \cdot N_u\right) - D \cdot \left(C^2 + N_u^2\right) \cdot (A+B)^2\right]^2}} = 0$$



Unit. $AB := 1$ Given. $N_1 := 2.30262$ $N_2 := 1.67305$ $N_3 := 1.05789$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot(A+B)-A\cdot N_u}{A\cdot C+N_u\cdot(A+B)} = 0.375202$$

$$Num := \frac{C\cdot(A+B)-A\cdot N_u}{\sqrt{\left[C\cdot(A+B)-A\cdot N_u\right]^2}}$$

$$Den := \frac{A\cdot C+N_u\cdot(A+B)}{\sqrt{\left[A\cdot C+N_u\cdot(A+B)\right]^2}}$$

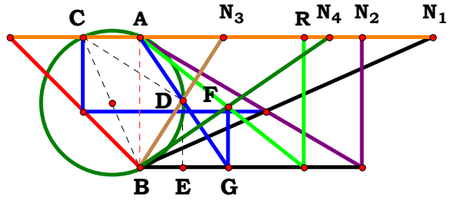
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left[N_u\cdot(A+B)+A\cdot C\right]^2}\cdot\left[C\cdot(A+B)-A\cdot N_u\right]}{\sqrt{\left[C\cdot(A+B)-A\cdot N_u\right]^2}\cdot\left[N_u\cdot(A+B)+A\cdot C\right]} = 0$$

4RST1AB4R4



$N_1 = 2.24451$
$N_2 = 1.70210$
$N_3 = 0.64140$
$N_4 = 1.45264$
$R = 1.25869$

Unit. $AB := 1$ Given. $N_1 := 2.24451$ $N_2 := 1.70210$ $N_3 := .64140$

$N_4 := 1.45264$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left[C \cdot (A + B) - A \cdot N_u\right]}{\left({N_u}^2 - C \cdot D\right) \cdot (A + B) + N_u \cdot A \cdot (C + D)} = 1.258684$$

$$Num := \frac{N_u \cdot \left[C \cdot (A + B) - A \cdot N_u\right]}{\sqrt{\left[N_u \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]^2}}$$

$$Den := \frac{\left({N_u}^2 - C \cdot D\right) \cdot (A + B) + N_u \cdot A \cdot (C + D)}{\sqrt{\left[\left({N_u}^2 - C \cdot D\right) \cdot (A + B) + N_u \cdot A \cdot (C + D)\right]^2}}$$

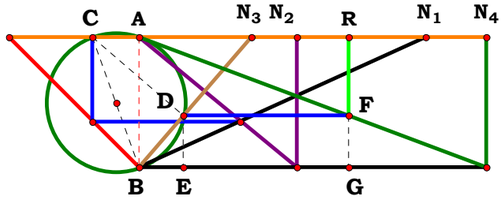
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[C \cdot (A + B) - A \cdot N_u\right] \cdot \sqrt{\left[(A + B) \cdot \left({N_u}^2 - C \cdot D\right) + A \cdot N_u \cdot (C + D)\right]^2}}{\sqrt{{N_u}^2 \cdot \left[C \cdot (A + B) - A \cdot N_u\right]^2} \cdot \left[(A + B) \cdot \left({N_u}^2 - C \cdot D\right) + A \cdot N_u \cdot (C + D)\right]} = 0$$

4RST1AB4R5



$N_1 = 2.19608$
$N_2 = 1.20813$
$N_3 = 0.86417$
$N_4 = 2.66336$
$R = 1.60626$

Unit. $AB := 1$ Given. $N_1 := 2.19608$ $N_2 := 1.20813$ $N_3 := .86417$

$N_4 := 2.66336$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2 \cdot \left[A \cdot C + N_u \cdot (A + B)\right]}{D \cdot \left(C^2 + N_u^2\right) \cdot (A + B)} = 1.606255$$

$$Num := \frac{N_u^2 \cdot \left[A \cdot C + N_u \cdot (A + B)\right]}{\sqrt{\left[N_u^2 \cdot \left[A \cdot C + N_u \cdot (A + B)\right]\right]^2}}$$

$$Den := \frac{D \cdot \left(C^2 + N_u^2\right) \cdot (A + B)}{\sqrt{\left[D \cdot \left(C^2 + N_u^2\right) \cdot (A + B)\right]^2}}$$

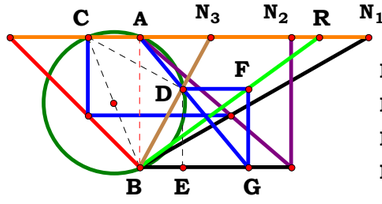
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \left[N_u \cdot (A + B) + A \cdot C\right] \cdot \sqrt{D^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A + B)^2}}{D \cdot \sqrt{N_u^4 \cdot \left[N_u \cdot (A + B) + A \cdot C\right]^2} \cdot \left(C^2 + N_u^2\right) \cdot (A + B)} = 0$$

4RST1AB4R6



$N_1 = 1.75053$
$N_2 = 1.15970$
$N_3 = 0.54454$
$R = 1.37485$

Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := 1.15970$ $N_3 := .54454$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\left(C^2 + N_u{}^2\right)\cdot(A+B)}{C\cdot\left[A\cdot C + N_u\cdot(A+B)\right]} = 1.374848$$

$$Num := \frac{\left(C^2 + N_u{}^2\right)\cdot(A+B)}{\sqrt{\left[\left(C^2 + N_u{}^2\right)\cdot(A+B)\right]^2}}$$

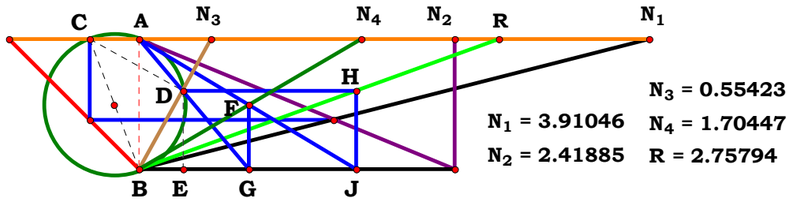
$$Den := \frac{C\cdot\left[A\cdot C + N_u\cdot(A+B)\right]}{\sqrt{\left[C\cdot\left[A\cdot C + N_u\cdot(A+B)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{C^2\cdot\left[N_u\cdot(A+B) + A\cdot C\right]^2}\cdot\left(C^2 + N_u{}^2\right)\cdot(A+B)}{C\cdot\left[N_u\cdot(A+B) + A\cdot C\right]\cdot\sqrt{\left(C^2 + N_u{}^2\right)^2\cdot(A+B)^2}} = 0$$

4RST1AB4R7



Unit. $AB := 1$ **Given.** $N_1 := 3.91046$ $N_2 := 2.41885$ $N_3 := .55423$ $N_4 := 1.70447$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B)}{C \cdot \left({N_u}^2 - C \cdot D\right) \cdot (A + B) + N_u \cdot A \cdot C \cdot (C + D)} = 2.757919$$

$$Num := \frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{C \cdot \left({N_u}^2 - C \cdot D\right) \cdot (A + B) + N_u \cdot A \cdot C \cdot (C + D)}{\sqrt{\left[C \cdot \left({N_u}^2 - C \cdot D\right) \cdot (A + B) + N_u \cdot A \cdot C \cdot (C + D)\right]^2}}$$

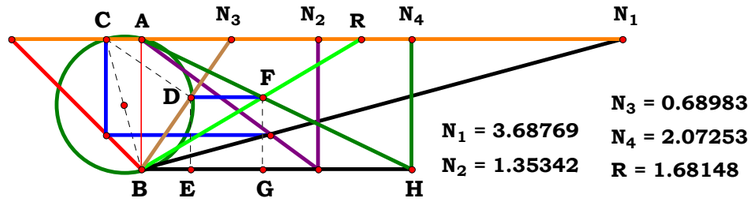
$$L := \frac{Num}{Den}$$

Definitions.

Num = 1 **Den = 1** **L = 1**

$$L - \frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B) \cdot \sqrt{\left[C \cdot (A + B) \cdot \left({N_u}^2 - C \cdot D\right) + A \cdot C \cdot N_u \cdot (C + D)\right]^2}}{\left[C \cdot (A + B) \cdot \left({N_u}^2 - C \cdot D\right) + A \cdot C \cdot N_u \cdot (C + D)\right] \cdot \sqrt{{N_u}^2 \cdot \left(C^2 + {N_u}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST1AB4R8



Unit. $AB := 1$ Given. $N_1 := 3.68769$ $N_2 := 1.35342$ $N_3 := .68983$ $N_4 := 2.07253$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2 \cdot [A \cdot C + N_u \cdot (A + B)]}{C \cdot D \cdot [A \cdot C + (B \cdot C - A \cdot N_u)]} = 1.681505$$

$$Num := \frac{N_u^2 \cdot [A \cdot C + N_u \cdot (A + B)]}{\sqrt{[N_u^2 \cdot [A \cdot C + N_u \cdot (A + B)]]^2}}$$

$$Den := \frac{C \cdot D \cdot [A \cdot C + (B \cdot C - A \cdot N_u)]}{\sqrt{[C \cdot D \cdot [A \cdot C + (B \cdot C - A \cdot N_u)]]^2}}$$

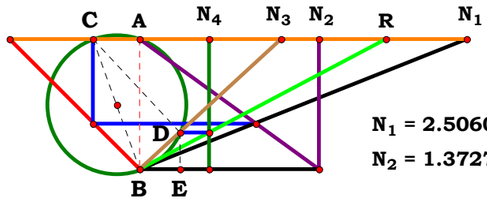
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot [N_u \cdot (A + B) + A \cdot C] \cdot \sqrt{C^2 \cdot D^2 \cdot (A \cdot C + B \cdot C - A \cdot N_u)^2}}{C \cdot D \cdot \sqrt{N_u^4 \cdot [N_u \cdot (A + B) + A \cdot C]^2} \cdot (A \cdot C + B \cdot C - A \cdot N_u)} = 0$$

4RST1AB4R9



$N_1 = 2.50603$
$N_2 = 1.37279$
$N_3 = 1.08694$
$N_4 = 0.53249$
$R = 1.88783$

Unit. $AB := 1$ Given. $N_1 := 2.50603$ $N_2 := 1.37279$ $N_3 := 1.08694$

$N_4 := .53249$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{C \cdot D \cdot \left[C \cdot (A + B) - A \cdot N_u\right]} = 1.887817$$

$$Num := \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{C \cdot D \cdot \left[C \cdot (A + B) - A \cdot N_u\right]}{\sqrt{\left[C \cdot D \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]^2}}$$

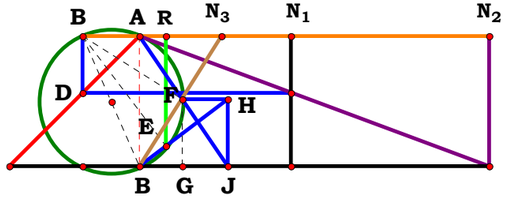
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{C^2 \cdot D^2 \cdot \left[C \cdot (A + B) - A \cdot N_u\right]^2}}{C \cdot D \cdot \left[C \cdot (A + B) - A \cdot N_u\right] \cdot \sqrt{N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST1AB5R0



$N_1 = 1.15970$
$N_2 = 2.68037$
$N_3 = 0.63171$
$R = 0.20783$

Unit. $AB := 1$ Given. $N_1 := 1.15970$ $N_2 := 2.68037$ $N_3 := .63171$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \left(A \cdot C - B \cdot N_u\right)}{A \cdot N_u \cdot \left[C^2 \cdot \left(2 \cdot B \cdot C + 3 \cdot A \cdot N_u\right) + A \cdot N_u{}^3\right] + C^4 \cdot \left(A^2 + B^2\right)} = 0.207828$$

$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \left(A \cdot C - B \cdot N_u\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \left(A \cdot C - B \cdot N_u\right)\right]^2}}$$

$$Den := \frac{A \cdot N_u \cdot \left[C^2 \cdot \left(2 \cdot B \cdot C + 3 \cdot A \cdot N_u\right) + A \cdot N_u{}^3\right] + C^4 \cdot \left(A^2 + B^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left[C^2 \cdot \left(2 \cdot B \cdot C + 3 \cdot A \cdot N_u\right) + A \cdot N_u{}^3\right] + C^4 \cdot \left(A^2 + B^2\right)\right]^2}}$$

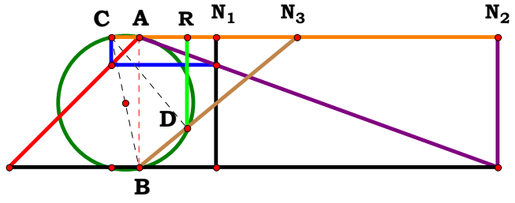
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \left(A \cdot C - B \cdot N_u\right) \cdot \sqrt{\left[C^4 \cdot \left(A^2 + B^2\right) + A \cdot N_u \cdot \left[C^2 \cdot \left(2 \cdot B \cdot C + 3 \cdot A \cdot N_u\right) + A \cdot N_u{}^3\right]\right]^2}}{\left[C^4 \cdot \left(A^2 + B^2\right) + A \cdot N_u \cdot \left[C^2 \cdot \left(2 \cdot B \cdot C + 3 \cdot A \cdot N_u\right) + A \cdot N_u{}^3\right]\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2 \cdot \left(A \cdot C - B \cdot N_u\right)^2}} = 0$$

4RST1AB5R1



$N_1 = 0.58824$
$N_2 = 2.74817$
$N_3 = 1.21286$
$R = 0.36341$

Unit. $AB := 1$ Given. $N_1 := .58824$ $N_2 := 2.74817$ $N_3 := 1.21286$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (A \cdot C - B \cdot N_u)}{A \cdot (C^2 + N_u^2)} = 0.363407$$

$$Num := \frac{N_u \cdot (A \cdot C - B \cdot N_u)}{\sqrt{[N_u \cdot (A \cdot C - B \cdot N_u)]^2}}$$

$$Den := \frac{A \cdot (C^2 + N_u^2)}{\sqrt{[A \cdot (C^2 + N_u^2)]^2}}$$

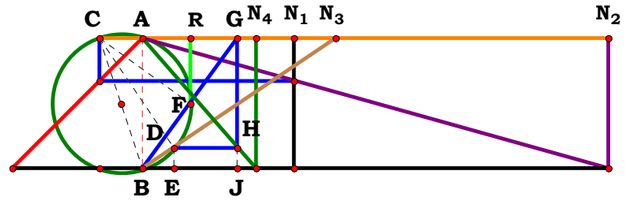
$$L := \frac{Num}{Den}$$

Definitions.

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{A^2 \cdot (C^2 + N_u^2)^2} \cdot (A \cdot C - B \cdot N_u)}{A \cdot (C^2 + N_u^2) \cdot \sqrt{N_u^2 \cdot (A \cdot C - B \cdot N_u)^2}} = 0$$

4RST1AB5R2



$N_1 = 1.15970$
$N_2 = 3.57146$
$N_3 = 1.48406$
$N_4 = 0.87149$
$R = 0.36334$

Unit. $AB := 1$ Given. $N_1 := 1.15970$ $N_2 := 3.57146$ $N_3 := 1.48406$

$N_4 := .87149$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2 \cdot (B \cdot C + A \cdot N_u) \cdot \left[D \cdot A^2 \cdot \left(C^2 + N_u^2 \right) - B \cdot N_u^2 \cdot (B \cdot C + A \cdot N_u) \right]}{A^3 \cdot D^2 \cdot \left(C^2 + N_u^2 \right)^2 + A \cdot N_u^4 \cdot (B \cdot C + A \cdot N_u)^2} = 0.363336$$

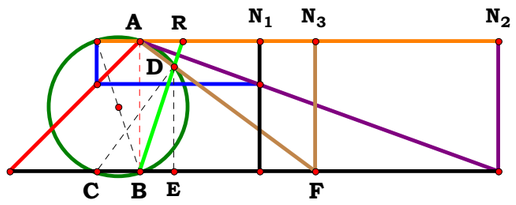
$$Num := \frac{N_u^2 \cdot (B \cdot C + A \cdot N_u) \cdot \left[D \cdot A^2 \cdot \left(C^2 + N_u^2 \right) - B \cdot N_u^2 \cdot (B \cdot C + A \cdot N_u) \right]}{\sqrt{\left[N_u^2 \cdot (B \cdot C + A \cdot N_u) \cdot \left[D \cdot A^2 \cdot \left(C^2 + N_u^2 \right) - B \cdot N_u^2 \cdot (B \cdot C + A \cdot N_u) \right] \right]^2}}$$

$$Den := \frac{A^3 \cdot D^2 \cdot \left(C^2 + N_u^2 \right)^2 + A \cdot N_u^4 \cdot (B \cdot C + A \cdot N_u)^2}{\sqrt{\left[A^3 \cdot D^2 \cdot \left(C^2 + N_u^2 \right)^2 + A \cdot N_u^4 \cdot (B \cdot C + A \cdot N_u)^2 \right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \sqrt{\left[A^3 \cdot D^2 \cdot \left(C^2 + N_u^2 \right)^2 + A \cdot N_u^4 \cdot (B \cdot C + A \cdot N_u)^2 \right]^2} \cdot \left[A^2 \cdot D \cdot \left(C^2 + N_u^2 \right) - B \cdot N_u^2 \cdot (B \cdot C + A \cdot N_u) \right] \cdot (B \cdot C + A \cdot N_u)}{\left[A^3 \cdot D^2 \cdot \left(C^2 + N_u^2 \right)^2 + A \cdot N_u^4 \cdot (B \cdot C + A \cdot N_u)^2 \right] \cdot \sqrt{N_u^4 \cdot \left[A^2 \cdot D \cdot \left(C^2 + N_u^2 \right) - B \cdot N_u^2 \cdot (B \cdot C + A \cdot N_u) \right]^2 \cdot (B \cdot C + A \cdot N_u)^2}} = 0$$



$N_1 = 0.91756$
$N_2 = 2.74817$
$N_3 = 1.34846$
$R = 0.32679$

Unit. $AB := 1$ Given. $N_1 := .91756$ $N_2 := 2.74817$ $N_3 := 1.34846$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A \cdot C - B \cdot N_u}{B \cdot C + A \cdot N_u} = 0.326792$$

$$Num := \frac{A \cdot C - B \cdot N_u}{\sqrt{(A \cdot C - B \cdot N_u)^2}}$$

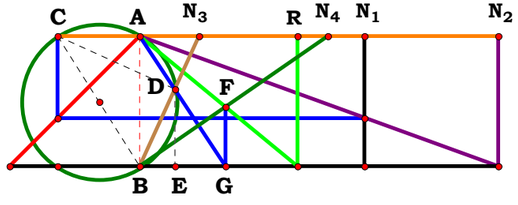
$$Den := \frac{B \cdot C + A \cdot N_u}{\sqrt{(B \cdot C + A \cdot N_u)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{(B \cdot C + A \cdot N_u)^2} \cdot (A \cdot C - B \cdot N_u)}{\sqrt{(A \cdot C - B \cdot N_u)^2} \cdot (B \cdot C + A \cdot N_u)} = 0$$

4RST1AB5R4



$N_1 = 1.72148$
$N_2 = 2.74817$
$N_3 = 0.45737$
$N_4 = 1.44295$
$R = 1.21076$

Unit. $AB := 1$ Given. $N_1 := 1.72148$ $N_2 := 2.74817$ $N_3 := .45737$

$N_4 := 1.44295$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A \cdot C - B \cdot N_u)}{A \cdot (N_u^2 - C \cdot D) + B \cdot N_u \cdot (C + D)} = 1.210742$$

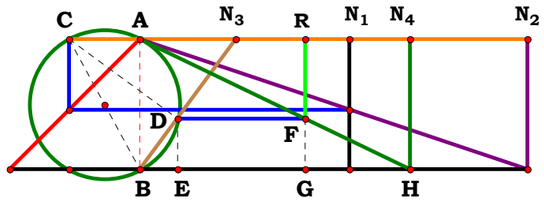
$$Num := \frac{N_u \cdot (A \cdot C - B \cdot N_u)}{\sqrt{[N_u \cdot (A \cdot C - B \cdot N_u)]^2}}$$

$$Den := \frac{A \cdot (N_u^2 - C \cdot D) + B \cdot N_u \cdot (C + D)}{\sqrt{[A \cdot (N_u^2 - C \cdot D) + B \cdot N_u \cdot (C + D)]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{[A \cdot (N_u^2 - C \cdot D) + B \cdot N_u \cdot (C + D)]^2} \cdot (A \cdot C - B \cdot N_u)}{\sqrt{N_u^2 \cdot (A \cdot C - B \cdot N_u)^2} \cdot [A \cdot (N_u^2 - C \cdot D) + B \cdot N_u \cdot (C + D)]} = 0$$



$N_1 = 1.60525$
$N_2 = 2.97094$
$N_3 = 0.73826$
$N_4 = 2.07253$
$R = 1.26619$

Unit. $AB := 1$ Given. $N_1 := 1.60525$ $N_2 := 2.9709$ $N_3 := .73826$ $N_4 := 2.07253$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2 \cdot (B \cdot C + A \cdot N_u)}{A \cdot D \cdot (C^2 + N_u^2)} = 1.266203$$

$$Num := \frac{N_u^2 \cdot (B \cdot C + A \cdot N_u)}{\sqrt{\left[N_u^2 \cdot (B \cdot C + A \cdot N_u)\right]^2}}$$

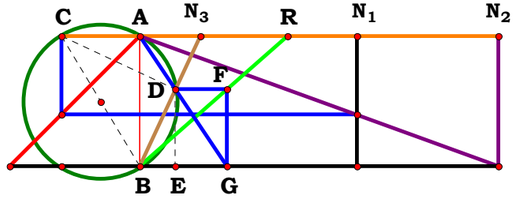
$$Den := \frac{A \cdot D \cdot (C^2 + N_u^2)}{\sqrt{\left[A \cdot D \cdot (C^2 + N_u^2)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot (B \cdot C + A \cdot N_u) \cdot \sqrt{A^2 \cdot D^2 \cdot (C^2 + N_u^2)^2}}{A \cdot D \cdot (C^2 + N_u^2) \cdot \sqrt{N_u^4 \cdot (B \cdot C + A \cdot N_u)^2}} = 0$$

4RST1AB5R6



$N_1 = 1.66336$
$N_2 = 2.74817$
$N_3 = 0.46705$
$R = 1.13599$

Unit. $AB := 1$ Given. $N_1 := 1.66336$ $N_2 := 2.74817$ $N_3 := .46705$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A\cdot\left(C^2+N_u{}^2\right)}{B\cdot C^2+A\cdot N_u\cdot C}=1.135991$$

$$Num := \frac{A\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[A\cdot\left(C^2+N_u{}^2\right)\right]^2}}$$

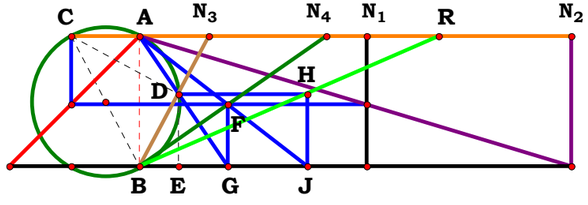
$$Den := \frac{B\cdot C^2+A\cdot N_u\cdot C}{\sqrt{\left(B\cdot C^2+A\cdot N_u\cdot C\right)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{A\cdot\sqrt{\left(B\cdot C^2+A\cdot N_u\cdot C\right)^2}\cdot\left(C^2+N_u{}^2\right)}{\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2}\cdot\left(B\cdot C^2+A\cdot N_u\cdot C\right)}=0$$

4RST1AB5R7



$N_1 = 1.74085$
$N_2 = 3.30995$
$N_3 = 0.53485$
$N_4 = 1.43327$
$R = 2.29918$

Unit. $AB := 1$ **Given.** $N_1 := 1.74085$ $N_2 := 3.30995$ $N_3 := .53485$

$N_4 := 1.43347$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{A \cdot C \cdot \left(N_u{}^2 - C \cdot D\right) + B \cdot C \cdot N_u \cdot (C + D)} = 2.298906$$

$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

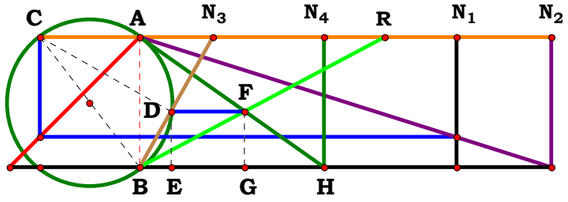
$$Den := \frac{A \cdot C \cdot \left(N_u{}^2 - C \cdot D\right) + B \cdot C \cdot N_u \cdot (C + D)}{\sqrt{\left[A \cdot C \cdot \left(N_u{}^2 - C \cdot D\right) + B \cdot C \cdot N_u \cdot (C + D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{\left[A \cdot C \cdot \left(N_u{}^2 - C \cdot D\right) + B \cdot C \cdot N_u \cdot (C + D)\right]^2}}{\left[A \cdot C \cdot \left(N_u{}^2 - C \cdot D\right) + B \cdot C \cdot N_u \cdot (C + D)\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST1AB5R8



$N_1 = 2.42854$
$N_2 = 3.15497$
$N_3 = 0.56391$
$N_4 = 1.41390$
$R = 1.87893$

Unit. $AB := 1$ Given. $N_1 := 2.42854$ $N_2 := 3.15497$ $N_3 := .56391$ $N_4 := 1.41390$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2 \cdot (B \cdot C + A \cdot N_u)}{D \cdot (A \cdot C^2 - B \cdot C \cdot N_u)} = 1.878932$$

$$Num := \frac{N_u^2 \cdot (B \cdot C + A \cdot N_u)}{\sqrt{\left[N_u^2 \cdot (B \cdot C + A \cdot N_u)\right]^2}}$$

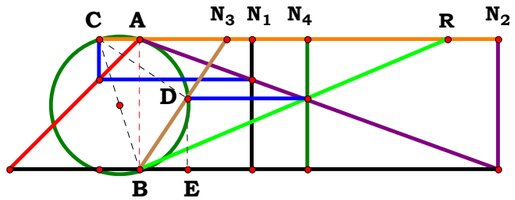
$$Den := \frac{D \cdot (A \cdot C^2 - B \cdot C \cdot N_u)}{\sqrt{\left[D \cdot (A \cdot C^2 - B \cdot C \cdot N_u)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \sqrt{D^2 \cdot (A \cdot C^2 - B \cdot C \cdot N_u)^2} \cdot (B \cdot C + A \cdot N_u)}{D \cdot \sqrt{N_u^4 \cdot (B \cdot C + A \cdot N_u)^2} \cdot (A \cdot C^2 - B \cdot C \cdot N_u)} = 0$$

4RST1AB5R9



$N_1 = 0.85944$
$N_2 = 2.74817$
$N_3 = 0.67045$
$N_4 = 1.28798$
$R = 2.36224$

Unit. $AB := 1$ Given. $N_1 := .85944$ $N_2 := 2.74817$ $N_3 := .67045$

$N_4 := 1.28798$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{D \cdot \left[C \cdot \left(A \cdot C - B \cdot N_u\right)\right]} = 2.36222$$

$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

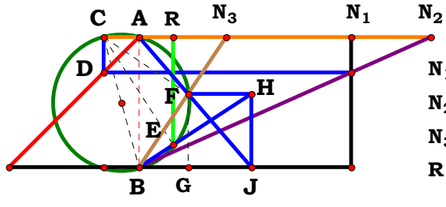
$$Den := \frac{D \cdot \left[C \cdot \left(A \cdot C - B \cdot N_u\right)\right]}{\sqrt{\left[D \cdot \left[C \cdot \left(A \cdot C - B \cdot N_u\right)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{C^2 \cdot D^2 \cdot \left(A \cdot C - B \cdot N_u\right)^2}}{C \cdot D \cdot \left(A \cdot C - B \cdot N_u\right) \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST1AB6R0



$N_1 = 1.62462$
$N_2 = 2.23482$
$N_3 = 0.67045$
$R = 0.26541$

Unit. $AB := 1$ **Given.** $N_1 := 1.62462$ $N_2 := 2.23482$ $N_3 := .67045$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[A \cdot C + N_u \cdot (B - A)\right]}{C^4 \cdot \left(2 \cdot A^2 - 2 \cdot A \cdot B + B^2\right) + 2 \cdot C^3 \cdot A \cdot N_u \cdot (A - B) + A^2 \cdot N_u^2 \cdot \left(3 \cdot C^2 + N_u^2\right)} = 0.265414$$

$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[A \cdot C + N_u \cdot (B - A)\right]}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[A \cdot C + N_u \cdot (B - A)\right]\right]^2}}$$

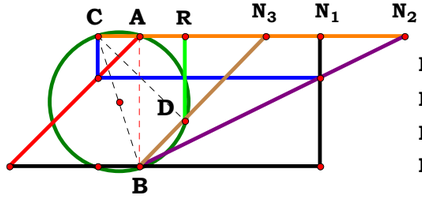
$$Den := \frac{C^4 \cdot \left(2 \cdot A^2 - 2 \cdot A \cdot B + B^2\right) + 2 \cdot C^3 \cdot A \cdot N_u \cdot (A - B) + A^2 \cdot N_u^2 \cdot \left(3 \cdot C^2 + N_u^2\right)}{\sqrt{\left[C^4 \cdot \left(2 \cdot A^2 - 2 \cdot A \cdot B + B^2\right) + 2 \cdot C^3 \cdot A \cdot N_u \cdot (A - B) + A^2 \cdot N_u^2 \cdot \left(3 \cdot C^2 + N_u^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left[A \cdot C - N_u \cdot (A - B)\right] \cdot \sqrt{\left[C^4 \cdot \left(2 \cdot A^2 - 2 \cdot A \cdot B + B^2\right) + A^2 \cdot N_u^2 \cdot \left(3 \cdot C^2 + N_u^2\right) + 2 \cdot A \cdot C^3 \cdot N_u \cdot (A - B)\right]^2} \cdot \left(C^2 + N_u^2\right)}{\left[C^4 \cdot \left(2 \cdot A^2 - 2 \cdot A \cdot B + B^2\right) + A^2 \cdot N_u^2 \cdot \left(3 \cdot C^2 + N_u^2\right) + 2 \cdot A \cdot C^3 \cdot N_u \cdot (A - B)\right] \cdot \sqrt{A^2 \cdot N_u^2 \cdot \left[A \cdot C - N_u \cdot (A - B)\right]^2 \cdot \left(C^2 + N_u^2\right)^2}} = 0$$

4RST1AB6R1



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.97071$
$R = 0.34480$

Unit. $AB := 1$ **Given.** $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .97071$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left[A \cdot C + N_u \cdot (B - A)\right]}{A \cdot \left(C^2 + {N_u}^2\right)} = 0.344798$$

$$Num := \frac{N_u \cdot \left[A \cdot C + N_u \cdot (B - A)\right]}{\sqrt{\left[N_u \cdot \left[A \cdot C + N_u \cdot (B - A)\right]\right]^2}}$$

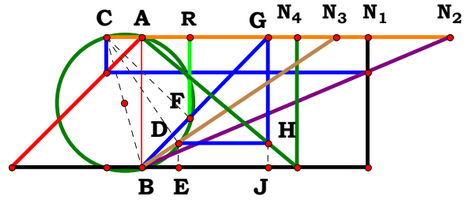
$$Den := \frac{A \cdot \left(C^2 + {N_u}^2\right)}{\sqrt{\left[A \cdot \left(C^2 + {N_u}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[A \cdot C - N_u \cdot (A - B)\right] \cdot \sqrt{A^2 \cdot \left(C^2 + {N_u}^2\right)^2}}{A \cdot \left(C^2 + {N_u}^2\right) \cdot \sqrt{{N_u}^2 \cdot \left[A \cdot C - N_u \cdot (A - B)\right]^2}} = 0$$

4RST1AB6R2



$N_1 = 1.73116$
$N_2 = 2.36074$
$N_3 = 1.49375$
$N_4 = 1.19112$
$R = 0.37056$

Unit. $AB := 1$ Given. $N_1 := 1.73116$ $N_2 := 2.36074$ $N_3 := 1.49375$

$N_4 := 1.19112$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2\cdot\left[C\cdot(A-B)+A\cdot N_u\right]\cdot\left[A^2\cdot\left(C^2+N_u^2\right)\cdot D+N_u^2\cdot(B-A)\cdot\left[C\cdot(A-B)+A\cdot N_u\right]\right]}{D^2\cdot A^3\cdot\left(C^2+N_u^2\right)^2+A\cdot N_u^4\cdot\left(A\cdot C-B\cdot C+A\cdot N_u\right)^2}=0.370564$$

$$Num := \frac{N_u^2\cdot\left[C\cdot(A-B)+A\cdot N_u\right]\cdot\left[A^2\cdot\left(C^2+N_u^2\right)\cdot D+N_u^2\cdot(B-A)\cdot\left[C\cdot(A-B)+A\cdot N_u\right]\right]}{\sqrt{\left[N_u^2\cdot\left[C\cdot(A-B)+A\cdot N_u\right]\cdot\left[A^2\cdot\left(C^2+N_u^2\right)\cdot D+N_u^2\cdot(B-A)\cdot\left[C\cdot(A-B)+A\cdot N_u\right]\right]\right]^2}}$$

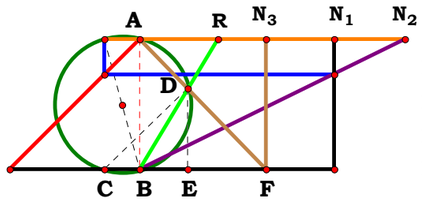
$$Den := \frac{D^2\cdot A^3\cdot\left(C^2+N_u^2\right)^2+A\cdot N_u^4\cdot\left(A\cdot C-B\cdot C+A\cdot N_u\right)^2}{\sqrt{\left[D^2\cdot A^3\cdot\left(C^2+N_u^2\right)^2+A\cdot N_u^4\cdot\left(A\cdot C-B\cdot C+A\cdot N_u\right)^2\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{N_u^2\cdot\left[A\cdot N_u+C\cdot(A-B)\right]\cdot\left[A^2\cdot D\cdot\left(C^2+N_u^2\right)-N_u^2\cdot\left[A\cdot N_u+C\cdot(A-B)\right]\cdot(A-B)\right]\cdot\sqrt{\left[A\cdot N_u^4\cdot\left(A\cdot C-B\cdot C+A\cdot N_u\right)^2+A^3\cdot D^2\cdot\left(C^2+N_u^2\right)^2\right]^2}}{\left[A\cdot N_u^4\cdot\left(A\cdot C-B\cdot C+A\cdot N_u\right)^2+A^3\cdot D^2\cdot\left(C^2+N_u^2\right)^2\right]\cdot\sqrt{N_u^4\cdot\left[A\cdot N_u+C\cdot(A-B)\right]^2\cdot\left[A^2\cdot D\cdot\left(C^2+N_u^2\right)-N_u^2\cdot\left[A\cdot N_u+C\cdot(A-B)\right]\cdot(A-B)\right]^2}}=0$$

4RST1AB6R3



$N_1 = 1.48902$
$N_2 = 2.03142$
$N_3 = 0.97071$
R = 0.59853

Unit. $AB := 1$ Given. $N_1 := 1.48902$ $N_2 := 2.03142$ $N_3 := .97071$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A \cdot C + N_u \cdot (B - A)}{C \cdot (A - B) + A \cdot N_u} = 0.598534$$

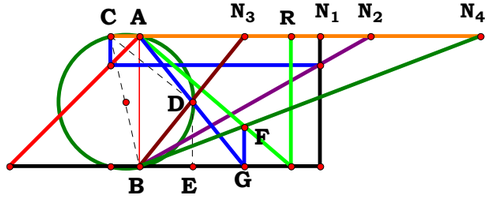
$$Num := \frac{A \cdot C + N_u \cdot (B - A)}{\sqrt{\left[A \cdot C + N_u \cdot (B - A)\right]^2}}$$

$$Den := \frac{C \cdot (A - B) + A \cdot N_u}{\sqrt{\left[C \cdot (A - B) + A \cdot N_u\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[A \cdot C - N_u \cdot (A - B)\right] \cdot \sqrt{\left[A \cdot N_u + C \cdot (A - B)\right]^2}}{\left[A \cdot N_u + C \cdot (A - B)\right] \cdot \sqrt{\left[A \cdot C - N_u \cdot (A - B)\right]^2}} = 0$$



$N_1 = 1.38247$
$N_2 = 1.76991$
$N_3 = 0.80606$
$N_4 = 2.61493$
R = 1.15992

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 1.76991$ $N_3 := .80606$

$N_4 := 2.61493$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot [A \cdot C + N_u \cdot (B - A)]}{A \cdot {N_u}^2 + N_u \cdot (C + D) \cdot (A - B) - A \cdot C \cdot D} = 1.159894$$

$$Num := \frac{N_u \cdot [A \cdot C + N_u \cdot (B - A)]}{\sqrt{[N_u \cdot [A \cdot C + N_u \cdot (B - A)]]^2}}$$

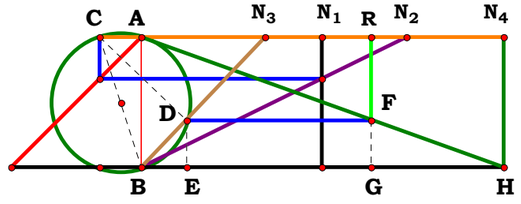
$$Den := \frac{A \cdot {N_u}^2 + N_u \cdot (C + D) \cdot (A - B) - A \cdot C \cdot D}{\sqrt{[A \cdot {N_u}^2 + N_u \cdot (C + D) \cdot (A - B) - A \cdot C \cdot D]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot [A \cdot C - N_u \cdot (A - B)] \cdot \sqrt{[A \cdot {N_u}^2 + (C + D) \cdot (A - B) \cdot N_u - A \cdot C \cdot D]^2}}{\sqrt{{N_u}^2 \cdot [A \cdot C - N_u \cdot (A - B)]^2} \cdot [A \cdot {N_u}^2 + (C + D) \cdot (A - B) \cdot N_u - A \cdot C \cdot D]} = 0$$

4RST1AB6R5



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.95134$
$N_4 = 2.77959$
$R = 1.76395$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .95134$ $N_4 := 2.77959$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2 \cdot [C \cdot (A - B) + A \cdot N_u]}{A \cdot D \cdot (C^2 + N_u^2)} = 1.763951$$

$$Num := \frac{N_u^2 \cdot [C \cdot (A - B) + A \cdot N_u]}{\sqrt{[N_u^2 \cdot [C \cdot (A - B) + A \cdot N_u]]^2}}$$

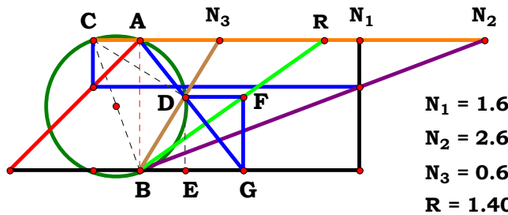
$$Den := \frac{A \cdot D \cdot (C^2 + N_u^2)}{\sqrt{[A \cdot D \cdot (C^2 + N_u^2)]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot [A \cdot N_u + C \cdot (A - B)] \cdot \sqrt{A^2 \cdot D^2 \cdot (C^2 + N_u^2)^2}}{A \cdot D \cdot (C^2 + N_u^2) \cdot \sqrt{N_u^4 \cdot [A \cdot N_u + C \cdot (A - B)]^2}} = 0$$

4RST1AB6R6



$N_1 = 1.68273$
$N_2 = 2.64163$
$N_3 = 0.61234$
$R = 1.40973$

Unit. $AB := 1$ Given. $N_1 := 1.68273$ $N_2 := 2.64163$ $N_3 := .61234$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A\cdot\left(C^2+{N_u}^2\right)}{C\cdot\left[C\cdot(A-B)+A\cdot N_u\right]} = 1.40973$$

$$Num := \frac{A\cdot\left(C^2+{N_u}^2\right)}{\sqrt{\left[A\cdot\left(C^2+{N_u}^2\right)\right]^2}}$$

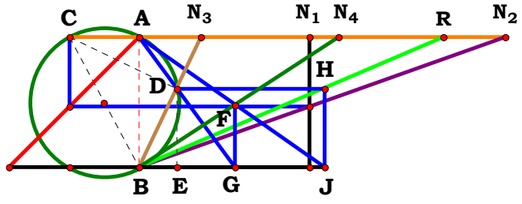
$$Den := \frac{C\cdot\left[C\cdot(A-B)+A\cdot N_u\right]}{\sqrt{\left[C\cdot\left[C\cdot(A-B)+A\cdot N_u\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A\cdot\left(C^2+{N_u}^2\right)\cdot\sqrt{C^2\cdot\left[A\cdot N_u+C\cdot(A-B)\right]^2}}{C\cdot\left[A\cdot N_u+C\cdot(A-B)\right]\cdot\sqrt{A^2\cdot\left(C^2+{N_u}^2\right)^2}} = 0$$

4RST1AB6R7



$N_1 = 1.30499$
$N_2 = 2.80628$
$N_3 = 0.47674$
$N_4 = 1.53013$
$R = 2.33832$

Unit. $AB := 1$ **Given.** $N_1 := 1.30499$ $N_2 := 2.80628$ $N_3 := .47674$ $N_4 := 1.53013$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{C \cdot \left[A \cdot N_u{}^2 + N_u \cdot (C + D) \cdot (A - B) - A \cdot C \cdot D\right]} = 2.338314$$

$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

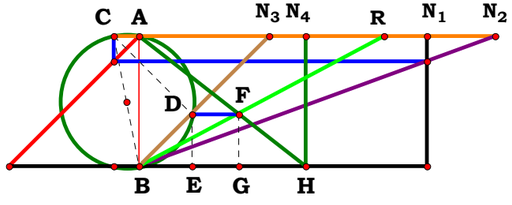
$$Den := \frac{C \cdot \left[A \cdot N_u{}^2 + N_u \cdot (C + D) \cdot (A - B) - A \cdot C \cdot D\right]}{\sqrt{\left[C \cdot \left[A \cdot N_u{}^2 + N_u \cdot (C + D) \cdot (A - B) - A \cdot C \cdot D\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{C^2 \cdot \left[A \cdot N_u{}^2 + (C + D) \cdot (A - B) \cdot N_u - A \cdot C \cdot D\right]^2} \cdot \left(C^2 + N_u{}^2\right)}{C \cdot \left[A \cdot N_u{}^2 + (C + D) \cdot (A - B) \cdot N_u - A \cdot C \cdot D\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST1AB6R8



$N_1 = 2.20577$
$N_2 = 2.72880$
$N_3 = 0.99977$
$N_4 = 1.27829$
$R = 1.88362$

Unit. $AB := 1$ Given. $N_1 := 2.20577$ $N_2 := 2.72880$ $N_3 := .99977$

$N_4 := 1.27829$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^2 \cdot \left[C \cdot (A - B) + A \cdot N_u\right]}{D \cdot \left[A \cdot C^2 + C \cdot N_u \cdot (B - A)\right]} = 1.883604$$

$$Num := \frac{N_u^2 \cdot \left[C \cdot (A - B) + A \cdot N_u\right]}{\sqrt{\left[N_u^2 \cdot \left[C \cdot (A - B) + A \cdot N_u\right]\right]^2}}$$

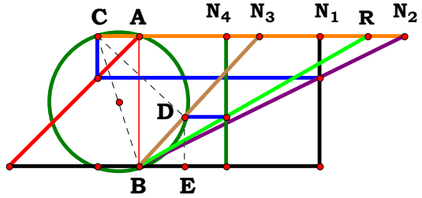
$$Den := \frac{D \cdot \left[A \cdot C^2 + C \cdot N_u \cdot (B - A)\right]}{\sqrt{\left[D \cdot \left[A \cdot C^2 + C \cdot N_u \cdot (B - A)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \left[A \cdot N_u + C \cdot (A - B)\right] \cdot \sqrt{D^2 \cdot \left[A \cdot C^2 - C \cdot N_u \cdot (A - B)\right]^2}}{D \cdot \sqrt{N_u^4 \cdot \left[A \cdot N_u + C \cdot (A - B)\right]^2} \cdot \left[A \cdot C^2 - C \cdot N_u \cdot (A - B)\right]} = 0$$

4RST1AB6R9



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.92228$
$N_4 = 0.66809$
$R = 1.75280$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .92228$

$N_4 := .66809$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{D \cdot \left[A \cdot C^2 - C \cdot N_u \cdot (A - B)\right]} = 1.752789$$

$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

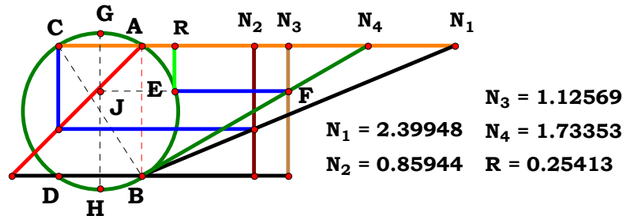
$$Den := \frac{D \cdot \left[A \cdot C^2 - C \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[D \cdot \left[A \cdot C^2 - C \cdot N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{D^2 \cdot \left[A \cdot C^2 - C \cdot N_u \cdot (A - B)\right]^2} \cdot \left(C^2 + N_u{}^2\right)}{D \cdot \left[A \cdot C^2 - C \cdot N_u \cdot (A - B)\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST2B1R2



Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := .85944$ $N_3 := 1.12569$

$N_4 := 1.73353$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+A\cdot C-B\cdot C}{2\cdot B\cdot C}=0.254132$$

$$Num := \frac{\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+A\cdot C-B\cdot C}{\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+A\cdot C-B\cdot C\right]^2}}$$

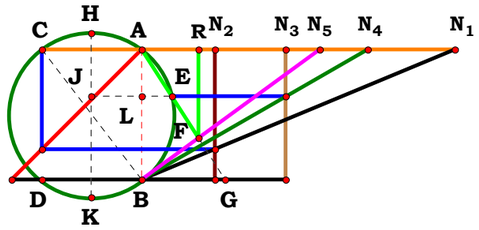
$$Den := \frac{2\cdot B\cdot C}{\sqrt{(2\cdot B\cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{B^2\cdot C^2}\cdot\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+A\cdot C-B\cdot C\right]}{B\cdot C\cdot\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+A\cdot C-B\cdot C\right]^2}}=0$$

4RST2B1R3



$N_1 = 2.39948$
$N_2 = 0.55918$
$N_3 = 1.10631$
$N_4 = 1.73353$
$N_5 = 1.36570$
$R = 0.43546$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := .55918$ $N_3 := 1.10631$

$N_4 := 1.73352$ $N_5 := 1.36570$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left[\sqrt{C^2 \cdot (A-B)^2 + 4 \cdot B^2 \cdot D \cdot (C-D)} + C \cdot (A-B)\right]}{E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot B^2 \cdot D \cdot (C-D)} + C \cdot E \cdot (A-B) + 2 \cdot B \cdot N_u \cdot (C-D)} = 0.435456$$

$$Num := \frac{N_u \cdot \left[\sqrt{C^2 \cdot (A-B)^2 + 4 \cdot B^2 \cdot D \cdot (C-D)} + C \cdot (A-B)\right]}{\sqrt{\left[N_u \cdot \left[\sqrt{C^2 \cdot (A-B)^2 + 4 \cdot B^2 \cdot D \cdot (C-D)} + C \cdot (A-B)\right]\right]^2}}$$

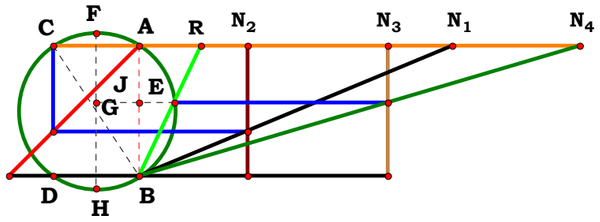
$$Den := \frac{E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot B^2 \cdot D \cdot (C-D)} + C \cdot E \cdot (A-B) + 2 \cdot B \cdot N_u \cdot (C-D)}{\sqrt{\left[E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot B^2 \cdot D \cdot (C-D)} + C \cdot E \cdot (A-B) + 2 \cdot B \cdot N_u \cdot (C-D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot B^2 \cdot D \cdot (C-D)} + C \cdot E \cdot (A-B) + 2 \cdot B \cdot N_u \cdot (C-D)\right]^2} \cdot \left[\sqrt{C^2 \cdot (A-B)^2 + 4 \cdot B^2 \cdot D \cdot (C-D)} + C \cdot (A-B)\right]}{\sqrt{N_u^2 \cdot \left[\sqrt{C^2 \cdot (A-B)^2 + 4 \cdot B^2 \cdot D \cdot (C-D)} + C \cdot (A-B)\right]^2 \cdot \left[E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot B^2 \cdot D \cdot (C-D)} + C \cdot E \cdot (A-B) + 2 \cdot B \cdot N_u \cdot (C-D)\right]}} = 0$$

4RST2B1R4



$N_1 = 2.39948$
$N_2 = 0.83038$
$N_3 = 1.91023$
$N_4 = 3.38011$
$R = 0.47225$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := .83038$ $N_3 := 1.91023$

$N_4 := 3.38011$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)}{2\cdot B\cdot D}=0.472254$$

$$Num := \frac{\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)}{\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)\right]^2}}$$

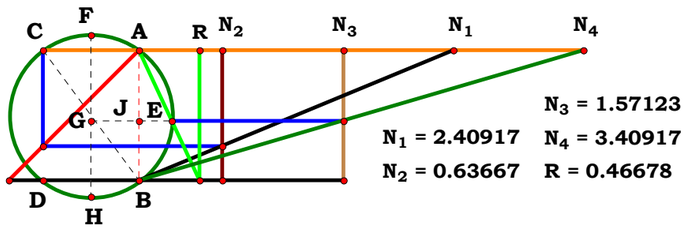
$$Den := \frac{2\cdot B\cdot D}{\sqrt{(2\cdot B\cdot D)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{B^2\cdot D^2}\cdot\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)\right]}{B\cdot D\cdot\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)\right]^2}}=0$$

4RST2B1R5



Unit. $AB := 1$ **Given.** $N_1 := 2.40917$ $N_2 := .63667$ $N_3 := 1.57123$ $N_4 := 3.40917$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)}{2\cdot B\cdot(C-D)} = 0.466776$$

$$Num := \frac{\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)}{\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)\right]^2}}$$

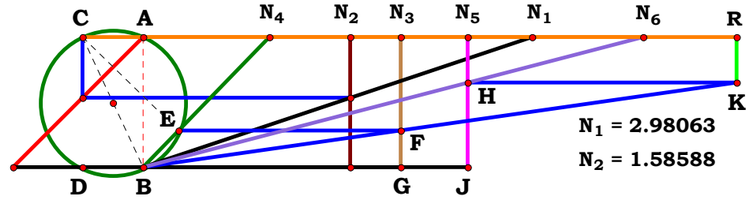
$$Den := \frac{2\cdot B\cdot(C-D)}{\sqrt{[2\cdot B\cdot(C-D)]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2\cdot(C-D)^2}\cdot\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)\right]}{B\cdot\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)\right]^2}\cdot(C-D)} = 0$$

4RST2B1R6



$N_3 = 1.97804$
$N_4 = 0.96835$
$N_5 = 2.48925$
$N_6 = 3.83557$
$R = 4.54856$

Unit. $AB := 1$ Given. $N_1 := 2.98063$ $N_2 := 1.58588$ $N_3 := 1.97804$

$N_4 := .96835$ $N_5 := 2.48925$ $N_6 := 3.83557$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{B \cdot F \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{C \cdot D \cdot E \cdot \left(B \cdot D + A \cdot N_u - B \cdot N_u\right)} = 4.548568$$

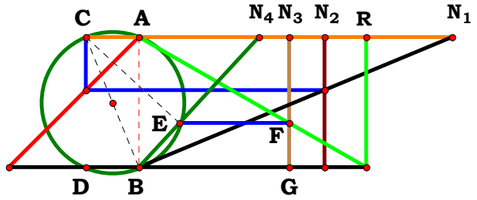
$$Num := \frac{B \cdot F \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot F \cdot N_u \cdot \left(D^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{C \cdot D \cdot E \cdot \left(B \cdot D + A \cdot N_u - B \cdot N_u\right)}{\sqrt{\left[C \cdot D \cdot E \cdot \left(B \cdot D + A \cdot N_u - B \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot F \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot \sqrt{C^2 \cdot D^2 \cdot E^2 \cdot \left(B \cdot D + A \cdot N_u - B \cdot N_u\right)^2}}{C \cdot D \cdot E \cdot \left(B \cdot D + A \cdot N_u - B \cdot N_u\right) \cdot \sqrt{B^2 \cdot F^2 \cdot N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2}} = 0$$

4RST2B1R7



$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 1.15474$
$N_4 = 0.91992$
$R = 1.74563$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := 1.15474$

$N_4 := .91992$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B\cdot\left(D^2+N_u{}^2\right)}{C\cdot D\cdot(B-A)+B\cdot C\cdot N_u}=1.745632$$

$$Num := \frac{B\cdot\left(D^2+N_u{}^2\right)}{\sqrt{B\cdot\left(D^2+N_u{}^2\right)}}$$

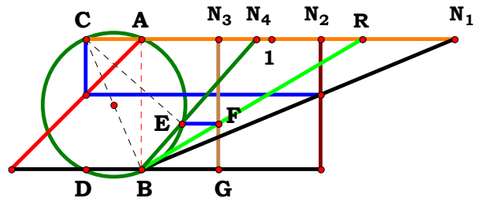
$$Den := \frac{C\cdot D\cdot(B-A)+B\cdot C\cdot N_u}{\sqrt{\left[C\cdot D\cdot(B-A)+B\cdot C\cdot N_u\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 6.437$ $Den = 1$ $L = 6.437937$

$$L-\frac{B\cdot\sqrt{\left[B\cdot C\cdot N_u-C\cdot D\cdot(A-B)\right]^2}\cdot\left(D^2+N_u{}^2\right)}{\sqrt{B\cdot\left(D^2+N_u{}^2\right)}\cdot\left[B\cdot C\cdot N_u-C\cdot D\cdot(A-B)\right]}=0$$

4RST2B1R8



$N_1 = 2.39948$
$N_2 = 1.37279$
$N_3 = 0.59297$
$N_4 = 0.88118$
$R = 1.69095$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.37279$ $N_3 := .59297$ $N_4 := .88118$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(D^2 + N_u^2\right)}{B \cdot C \cdot D^2 + C \cdot D \cdot N_u \cdot (A - B)} = 1.690955$$

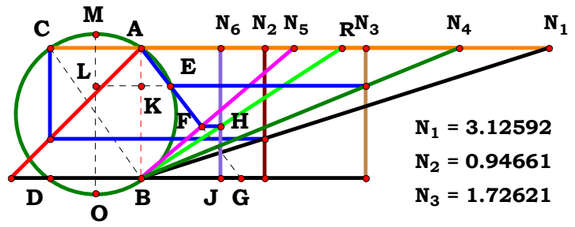
$$Num := \frac{B \cdot N_u \cdot \left(D^2 + N_u^2\right)}{\sqrt{\left[B \cdot N_u \cdot \left(D^2 + N_u^2\right)\right]^2}}$$

$$Den := \frac{B \cdot C \cdot D^2 + C \cdot D \cdot N_u \cdot (A - B)}{\sqrt{\left[B \cdot C \cdot D^2 + C \cdot D \cdot N_u \cdot (A - B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \left(D^2 + N_u^2\right) \cdot \sqrt{\left[B \cdot C \cdot D^2 + C \cdot N_u \cdot (A - B) \cdot D\right]^2}}{\left[B \cdot C \cdot D^2 + C \cdot N_u \cdot (A - B) \cdot D\right] \cdot \sqrt{B^2 \cdot N_u^2 \cdot \left(D^2 + N_u^2\right)^2}} = 0$$



$N_1 = 3.12592$ $N_4 = 2.44059$
$N_2 = 0.94661$ $N_5 = 1.17198$
$N_3 = 1.72621$ $N_6 = 0.61020$
R = 1.54222

Unit. $AB := 1$ Given. $N_1 := 3.12592$ $N_2 := .94661$ $N_3 := 1.72621$
$N_4 := 2.44059$ $N_5 := 1.17198$ $N_6 := .61020$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u\cdot\left[E\cdot\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot E\cdot(A-B)+2\cdot B\cdot N_u\cdot(C-D)\right]}{E\cdot F\cdot\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)\right]} = 1.542204$$

$$Num := \frac{N_u\cdot\left[E\cdot\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot E\cdot(A-B)+2\cdot B\cdot N_u\cdot(C-D)\right]}{\sqrt{\left[N_u\cdot\left[E\cdot\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot E\cdot(A-B)+2\cdot B\cdot N_u\cdot(C-D)\right]\right]^2}}$$

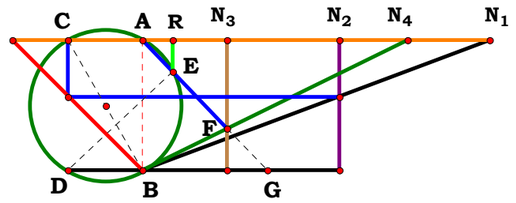
$$Den := \frac{E\cdot F\cdot\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)\right]}{\sqrt{\left[E\cdot F\cdot\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 Den = 1 L = 1

$$L - \frac{N_u\cdot\left[E\cdot\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot E\cdot(A-B)+2\cdot B\cdot N_u\cdot(C-D)\right]\cdot\sqrt{E^2\cdot F^2\cdot\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)\right]^2}}{E\cdot F\cdot\left[\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot(A-B)\right]\cdot\sqrt{N_u^2\cdot\left[E\cdot\sqrt{C^2\cdot(A-B)^2+4\cdot B^2\cdot D\cdot(C-D)}+C\cdot E\cdot(A-B)+2\cdot B\cdot N_u\cdot(C-D)\right]^2}} = 0$$

4RST2B2R0



$N_1 = 2.66100$
$N_2 = 1.50839$
$N_3 = 0.65108$
$N_4 = 2.03379$
$R = 0.22836$

Unit. $AB := 1$ Given. $N_1 := 2.66100$ $N_2 := 1.50839$ $N_3 := .65108$

$N_4 := 2.03379$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

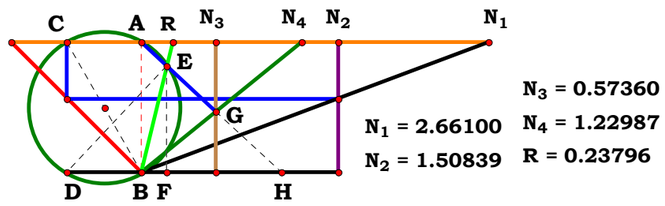
Descriptions.

$$\frac{N_u \cdot \left[B \cdot (C - D) - A \cdot N_u\right]}{B \cdot \left[(C - D)^2 + N_u{}^2\right]} = 0.228362 \qquad Num := \frac{N_u \cdot \left[B \cdot (C - D) - A \cdot N_u\right]}{\sqrt{\left[N_u \cdot \left[B \cdot (C - D) - A \cdot N_u\right]\right]^2}} \qquad Den := \frac{B \cdot \left[(C - D)^2 + N_u{}^2\right]}{\sqrt{\left[B \cdot \left[(C - D)^2 + N_u{}^2\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{B^2 \cdot \left(C^2 - 2 \cdot C \cdot D + D^2 + N_u{}^2\right)^2} \cdot \left(B \cdot C - B \cdot D - A \cdot N_u\right)}{B \cdot \sqrt{N_u{}^2 \cdot \left(B \cdot C - B \cdot D - A \cdot N_u\right)^2} \cdot \left(C^2 - 2 \cdot C \cdot D + D^2 + N_u{}^2\right)} = 0$$

4RST2B2R1



Unit. $AB := 1$ Given. $N_1 := 2.66100$ $N_2 := 1.50839$ $N_3 := .57360$

$N_4 := 1.22987$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B\cdot(C-D)-A\cdot N_u}{A\cdot(C-D)+B\cdot N_u} = 0.237951$$

$$Num := \frac{B\cdot(C-D)-A\cdot N_u}{\sqrt{\left[B\cdot(C-D)-A\cdot N_u\right]^2}}$$

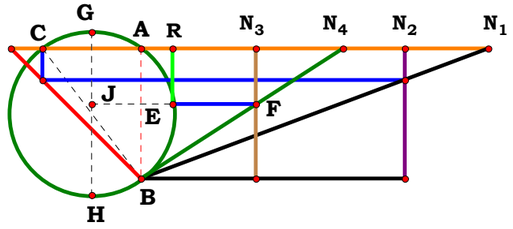
$$Den := \frac{A\cdot(C-D)+B\cdot N_u}{\sqrt{\left[A\cdot(C-D)+B\cdot N_u\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[B\cdot(C-D)-A\cdot N_u\right]\cdot\sqrt{\left[B\cdot N_u+A\cdot(C-D)\right]^2}}{\left[B\cdot N_u+A\cdot(C-D)\right]\cdot\sqrt{\left[B\cdot(C-D)-A\cdot N_u\right]^2}} = 0$$

4RST2B2R2



$N_1 = 2.66100$

$N_2 = 2.02174$

$N_3 = 0.88354$

$N_4 = 1.54950$

$R = 0.24412$

Unit. $AB := 1$ **Given.** $N_1 := 2.66100$ $N_2 := 2.02174$ $N_3 := .88354$

$N_4 := 1.54950$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C}{2 \cdot B \cdot C} = 0.244121$$

$$Num := \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C}{\sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C\right]^2}}$$

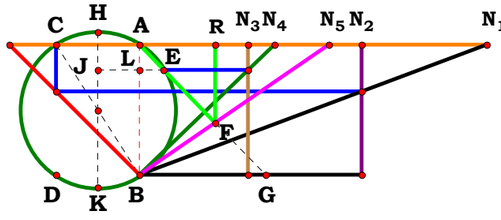
$$Den := \frac{2 \cdot B \cdot C}{\sqrt{(2 \cdot B \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2 \cdot C^2} \cdot \left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C\right]}{B \cdot C \cdot \sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C\right]^2}} = 0$$

4RST2B2R3



$N_1 = 2.66100$
$N_2 = 1.70210$
$N_3 = 0.83511$
$N_4 = 1.03615$
$N_5 = 1.45694$
$R = 0.58336$

Unit. $AB := 1$ Given. $N_1 := 2.66100$ $N_2 := 1.70210$ $N_3 := .83511$

$N_4 := 1.03615$ $N_5 := 1.45694$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left[A \cdot C - \sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)}\right]}{A \cdot C \cdot E - E \cdot \sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - 2 \cdot B \cdot N_u \cdot (C - D)} = 0.583357$$

$$Num := \frac{N_u \cdot \left[A \cdot C - \sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)}\right]}{\sqrt{\left[N_u \cdot \left[A \cdot C - \sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)}\right]\right]^2}}$$

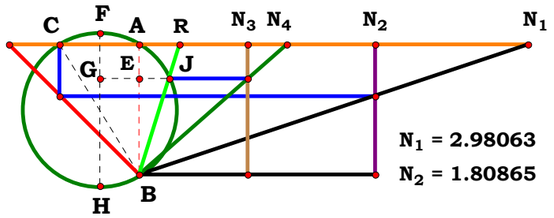
$$Den := \frac{A \cdot C \cdot E - E \cdot \sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - 2 \cdot B \cdot N_u \cdot (C - D)}{\sqrt{\left[A \cdot C \cdot E - E \cdot \sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - 2 \cdot B \cdot N_u \cdot (C - D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[E \cdot \sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C \cdot E + 2 \cdot B \cdot N_u \cdot (C - D)\right]^2} \cdot \left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C\right]}{\sqrt{N_u{}^2 \cdot \left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C\right]^2} \cdot \left[E \cdot \sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C \cdot E + 2 \cdot B \cdot N_u \cdot (C - D)\right]} = 0$$

4RST2B2R4



$N_1 = 2.98063$
$N_2 = 1.80865$
$N_3 = 0.83511$
$N_4 = 1.13301$
$R = 0.31373$

Unit. $AB := 1$ Given. $N_1 := 2.98063$ $N_2 := 1.80865$ $N_3 := .83511$

$N_4 := 1.13301$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C}{2 \cdot B \cdot D} = 0.313738$$

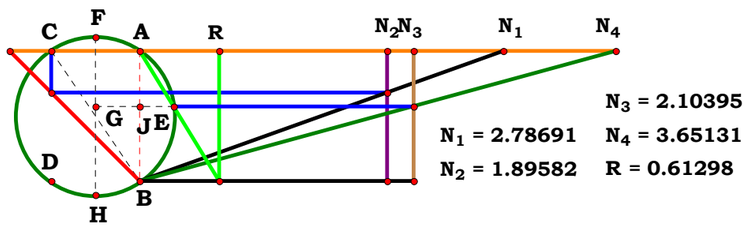
$$Num := \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C}{\sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C\right]^2}}$$

$$Den := \frac{2 \cdot B \cdot D}{\sqrt{(2 \cdot B \cdot D)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2 \cdot D^2} \cdot \left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C\right]}{B \cdot D \cdot \sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C\right]^2}} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 2.78691$ $N_2 := 1.89582$ $N_3 := 2.10395$

$N_4 := 3.65131$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C}{2 \cdot B \cdot (C - D)} = 0.612979$$

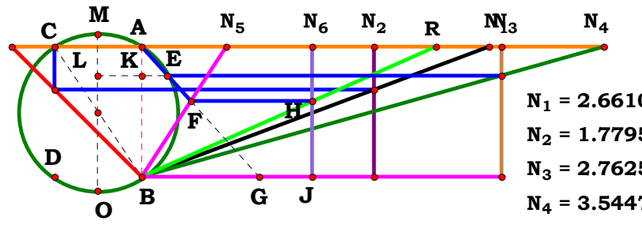
$$Num := \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C}{\sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C\right]^2}}$$

$$Den := \frac{2 \cdot B \cdot (C - D)}{\sqrt{[2 \cdot B \cdot (C - D)]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2 \cdot (C - D)^2} \cdot \left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C\right]}{B \cdot \sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot D \cdot (C - D)} - A \cdot C\right]^2} \cdot (C - D)} = 0$$



$N_1 = 2.66100$
$N_2 = 1.77959$
$N_3 = 2.76258$
$N_4 = 3.54477$
$N_5 = 0.65302$
$N_6 = 1.30758$
$R = 2.25760$

Unit. $AB := 1$ **Given.** $N_1 := 2.66100$ $N_2 := 1.77959$ $N_3 := 2.76258$

$N_4 := 3.54477$ $N_5 := .65302$ $N_6 := 1.30758$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u\cdot\left[E\cdot\sqrt{A^2\cdot C^2+4\cdot B^2\cdot D\cdot(C-D)}-A\cdot C\cdot E+2\cdot B\cdot N_u\cdot(C-D)\right]}{E\cdot F\cdot\left[\sqrt{A^2\cdot C^2+4\cdot B^2\cdot D\cdot(C-D)}-A\cdot C\right]}=2.257605$$

$$Num := \frac{N_u\cdot\left[E\cdot\sqrt{A^2\cdot C^2+4\cdot B^2\cdot D\cdot(C-D)}-A\cdot C\cdot E+2\cdot B\cdot N_u\cdot(C-D)\right]}{\sqrt{\left[N_u\cdot\left[E\cdot\sqrt{A^2\cdot C^2+4\cdot B^2\cdot D\cdot(C-D)}-A\cdot C\cdot E+2\cdot B\cdot N_u\cdot(C-D)\right]\right]^2}}$$

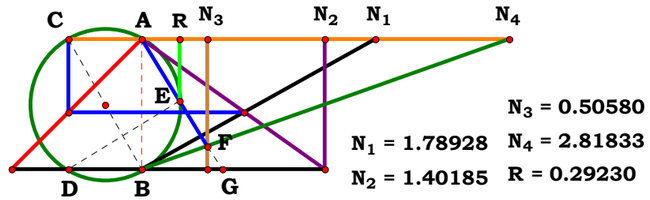
$$Den := \frac{E\cdot F\cdot\left[\sqrt{A^2\cdot C^2+4\cdot B^2\cdot D\cdot(C-D)}-A\cdot C\right]}{\sqrt{\left[E\cdot F\cdot\left[\sqrt{A^2\cdot C^2+4\cdot B^2\cdot D\cdot(C-D)}-A\cdot C\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L-\frac{N_u\cdot\left[E\cdot\sqrt{A^2\cdot C^2+4\cdot B^2\cdot D\cdot(C-D)}-A\cdot C\cdot E+2\cdot B\cdot N_u\cdot(C-D)\right]\cdot\sqrt{E^2\cdot F^2\cdot\left[\sqrt{A^2\cdot C^2+4\cdot B^2\cdot D\cdot(C-D)}-A\cdot C\right]^2}}{E\cdot F\cdot\left[\sqrt{A^2\cdot C^2+4\cdot B^2\cdot D\cdot(C-D)}-A\cdot C\right]\cdot\sqrt{N_u{}^2\cdot\left[E\cdot\sqrt{A^2\cdot C^2+4\cdot B^2\cdot D\cdot(C-D)}-A\cdot C\cdot E+2\cdot B\cdot N_u\cdot(C-D)\right]^2}}=0$$

4RST2B3R0



Unit. $AB := 1$ Given. $N_1 := 1.78926$ $N_2 := 1.40185$ $N_3 := .50580$

$N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left[(C - D) \cdot (A + B) - B \cdot N_u \right]}{(A + B) \cdot \left[(C - D)^2 + N_u^2 \right]} = 0.292301$$

$$Num := \frac{N_u \cdot \left[(C - D) \cdot (A + B) - B \cdot N_u \right]}{\sqrt{\left[N_u \cdot \left[(C - D) \cdot (A + B) - B \cdot N_u \right] \right]^2}}$$

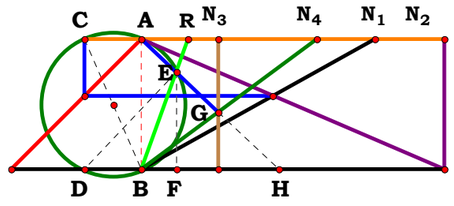
$$Den := \frac{(A + B) \cdot \left[(C - D)^2 + N_u^2 \right]}{\sqrt{\left[(A + B) \cdot \left[(C - D)^2 + N_u^2 \right] \right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[(A + B) \cdot (C - D) - B \cdot N_u \right] \cdot \sqrt{(A + B)^2 \cdot \left[N_u^2 + (C - D)^2 \right]^2}}{\sqrt{N_u^2 \cdot \left[(A + B) \cdot (C - D) - B \cdot N_u \right]^2} \cdot (A + B) \cdot \left[N_u^2 + (C - D)^2 \right]} = 0$$

4RST2B3R1



$N_1 = 1.78928$
$N_2 = 2.32200$
$N_3 = 0.59297$
$N_4 = 1.34610$
$R = 0.36035$

Unit. $AB := 1$ Given. $N_1 := 1.78929$ $N_2 := 2.32200$ $N_3 := .59297$

$N_4 := 1.3461$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{(C-D)\cdot(A+B)-B\cdot N_u}{B\cdot(C-D)+N_u\cdot(A+B)} = 0.360351$$

$$Num := \frac{(C-D)\cdot(A+B)-B\cdot N_u}{\sqrt{\left[(C-D)\cdot(A+B)-B\cdot N_u\right]^2}}$$

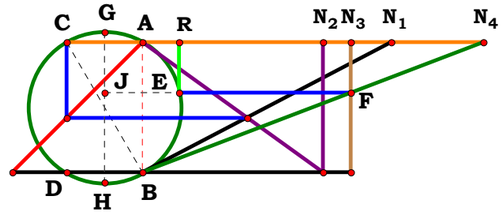
$$Den := \frac{B\cdot(C-D)+N_u\cdot(A+B)}{\sqrt{\left[B\cdot(C-D)+N_u\cdot(A+B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left[N_u\cdot(A+B)+B\cdot(C-D)\right]^2}\cdot\left[(A+B)\cdot(C-D)-B\cdot N_u\right]}{\sqrt{\left[(A+B)\cdot(C-D)-B\cdot N_u\right]^2}\cdot\left[N_u\cdot(A+B)+B\cdot(C-D)\right]} = 0$$

4RST2B3R2



$N_1 = 1.90551$
$N_2 = 1.38247$
$N_3 = 1.60029$
$N_4 = 2.61493$
$R = 0.27718$

Unit. $AB := 1$ Given. $N_1 := 1.90551$ $N_2 := 1.38247$ $N_3 := 1.60029$

$N_4 := 2.61493$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C}{2 \cdot (A+B) \cdot C} = 0.277175$$

$$Num := \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C}{\sqrt{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right]^2}}$$

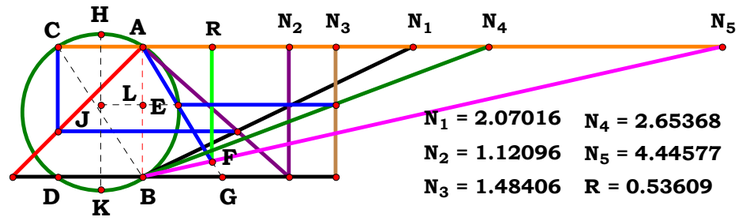
$$Den := \frac{2 \cdot (A+B) \cdot C}{\sqrt{[2 \cdot (A+B) \cdot C]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right] \cdot \sqrt{C^2 \cdot (2 \cdot A + 2 \cdot B)^2}}{C \cdot \sqrt{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right]^2} \cdot (2 \cdot A + 2 \cdot B)} = 0$$

4RST2B3R3



Unit. $AB := 1$ Given. $N_1 := 2.07016$ $N_2 := 1.12096$ $N_3 := 1.48406$

$N_4 := 2.65368$ $N_5 := 4.44577$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u\cdot\left[\sqrt{B^2\cdot C^2-4\cdot D^2\cdot(A+B)^2+4\cdot C\cdot D\cdot(A+B)^2}-B\cdot C\right]}{E\cdot\sqrt{B^2\cdot C^2-4\cdot D^2\cdot(A+B)^2+4\cdot C\cdot D\cdot(A+B)^2}+2\cdot N_u\cdot(C-D)\cdot(A+B)-B\cdot C\cdot E}=0.536087$$

$$Num := \frac{N_u\cdot\left[\sqrt{B^2\cdot C^2-4\cdot D^2\cdot(A+B)^2+4\cdot C\cdot D\cdot(A+B)^2}-B\cdot C\right]}{\sqrt{\left[N_u\cdot\left[\sqrt{B^2\cdot C^2-4\cdot D^2\cdot(A+B)^2+4\cdot C\cdot D\cdot(A+B)^2}-B\cdot C\right]\right]^2}}$$

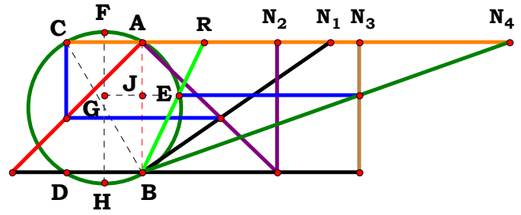
$$Den := \frac{E\cdot\sqrt{B^2\cdot C^2-4\cdot D^2\cdot(A+B)^2+4\cdot C\cdot D\cdot(A+B)^2}+2\cdot N_u\cdot(C-D)\cdot(A+B)-B\cdot C\cdot E}{\sqrt{\left[E\cdot\sqrt{B^2\cdot C^2-4\cdot D^2\cdot(A+B)^2+4\cdot C\cdot D\cdot(A+B)^2}+2\cdot N_u\cdot(C-D)\cdot(A+B)-B\cdot C\cdot E\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{N_u\cdot\sqrt{\left[E\cdot\sqrt{B^2\cdot C^2-4\cdot D^2\cdot(A+B)^2+4\cdot C\cdot D\cdot(A+B)^2}+2\cdot N_u\cdot(A+B)\cdot(C-D)-B\cdot C\cdot E\right]^2}\cdot\left[\sqrt{B^2\cdot C^2-4\cdot D^2\cdot(A+B)^2+4\cdot C\cdot D\cdot(A+B)^2}-B\cdot C\right]}{\sqrt{N_u^2\cdot\left[\sqrt{B^2\cdot C^2-4\cdot D^2\cdot(A+B)^2+4\cdot C\cdot D\cdot(A+B)^2}-B\cdot C\right]^2}\cdot\left[E\cdot\sqrt{B^2\cdot C^2-4\cdot D^2\cdot(A+B)^2+4\cdot C\cdot D\cdot(A+B)^2}+2\cdot N_u\cdot(A+B)\cdot(C-D)-B\cdot C\cdot E\right]}=0$$

4RST2B3R4



$N_1 = 1.44059$
$N_2 = 1.03379$
$N_3 = 1.66809$
$N_4 = 2.81833$
$R = 0.47329$

Unit. $AB := 1$ **Given.** $N_1 := 1.44059$ $N_2 := 1.03379$ $N_3 := 1.66809$ $N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C}{2 \cdot (A+B) \cdot D} = 0.473287$$

$$Num := \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C}{\sqrt{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right]^2}}$$

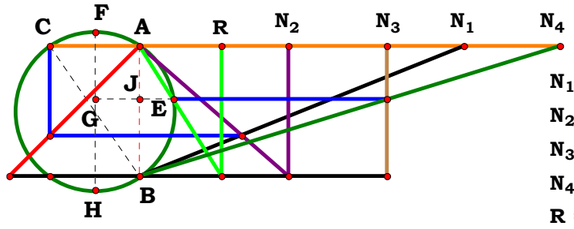
$$Den := \frac{2 \cdot (A+B) \cdot D}{\sqrt{[2 \cdot (A+B) \cdot D]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right] \cdot \sqrt{D^2 \cdot (2 \cdot A + 2 \cdot B)^2}}{D \cdot \sqrt{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right]^2} \cdot (2 \cdot A + 2 \cdot B)} = 0$$

4RST2B3R5



$N_1 = 2.48665$
$N_2 = 1.14033$
$N_3 = 1.90055$
$N_4 = 3.22514$
$R = 0.62530$

Unit. $AB := 1$ **Given.** $N_1 := 2.48665$ $N_2 := 1.14033$ $N_3 := 1.90055$ $N_4 := 3.22514$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C}{2 \cdot (A+B) \cdot (C-D)} = 0.625301$$

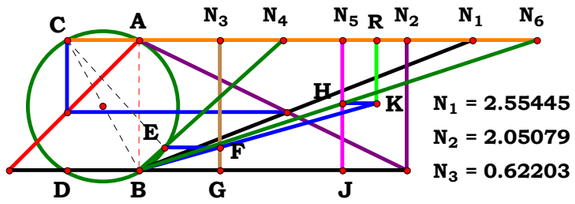
$$Num := \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C}{\sqrt{\left[\left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right] \cdot C\right]^2}}$$

$$Den := \frac{2 \cdot (A+B) \cdot (C-D)}{\sqrt{[2 \cdot (A+B) \cdot (C-D)]^2}} \quad L := \frac{Num}{Den}$$

$Num = 0.633$ $Den = 1$ $L = 0.633517$

$$L - \frac{\sqrt{(2 \cdot A + 2 \cdot B)^2 \cdot (C-D)^2} \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right]}{\sqrt{C^2 \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right]^2} \cdot (2 \cdot A + 2 \cdot B) \cdot (C-D)} = 0$$

4RST2B3R6



$N_1 = 2.55445$
$N_2 = 2.05079$
$N_3 = 0.62203$
$N_4 = 1.10395$
$N_5 = 1.55941$
$N_6 = 3.05208$
$R = 1.81897$

Unit. $AB := 1$ Given. $N_1 := 2.55445$ $N_2 := 2.05079$ $N_3 := .62203$

$N_4 := 1.10395$ $N_5 := 1.55941$ $N_6 := 3.05208$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{F \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{C \cdot D \cdot E \cdot \left[D \cdot (A + B) - B \cdot N_u\right]} = 1.818978$$

$$Num := \frac{F \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[F \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

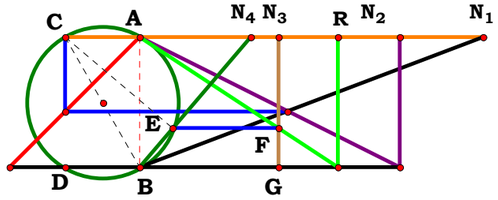
$$Den := \frac{C \cdot D \cdot E \cdot \left[D \cdot (A + B) - B \cdot N_u\right]}{\sqrt{\left[C \cdot D \cdot E \cdot \left[D \cdot (A + B) - B \cdot N_u\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{F \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{C^2 \cdot D^2 \cdot E^2 \cdot \left[D \cdot (A + B) - B \cdot N_u\right]^2}}{C \cdot D \cdot E \cdot \left[D \cdot (A + B) - B \cdot N_u\right] \cdot \sqrt{F^2 \cdot N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST2B3R7



$N_1 = 2.63194$
$N_2 = 1.99268$
$N_3 = 1.06757$
$N_4 = 0.85212$
$R = 1.52159$

Unit. $AB := 1$ Given. $N_1 := 2.63194$ $N_2 := 1.99268$ $N_3 := 1.06757$

$N_4 := .85212$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\left(D^2 + N_u{}^2\right)\cdot(A+B)}{C\cdot\left[B\cdot D + N_u\cdot(A+B)\right]} = 1.521591$$

$$Num := \frac{\left(D^2 + N_u{}^2\right)\cdot(A+B)}{\sqrt{\left[\left(D^2 + N_u{}^2\right)\cdot(A+B)\right]^2}}$$

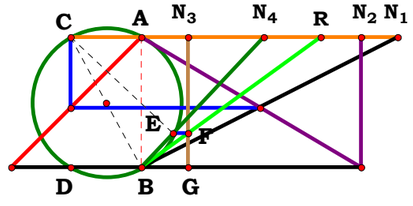
$$Den := \frac{C\cdot\left[B\cdot D + N_u\cdot(A+B)\right]}{\sqrt{\left[C\cdot\left[B\cdot D + N_u\cdot(A+B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{C^2\cdot\left[N_u\cdot(A+B) + B\cdot D\right]^2}\cdot\left(D^2 + N_u{}^2\right)\cdot(A+B)}{C\cdot\left[N_u\cdot(A+B) + B\cdot D\right]\cdot\sqrt{\left(D^2 + N_u{}^2\right)^2\cdot(A+B)^2}} = 0$$

4RST2B3R8



$N_1 = 1.96362$
$N_2 = 1.68273$
$N_3 = 0.36051$
$N_4 = 0.93929$
$R = 1.37315$

Unit. $AB := 1$ Given. $N_1 := 1.96362$ $N_2 := 1.68273$ $N_3 := .36051$

$N_4 := .93929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{C \cdot D \cdot \left[D \cdot (A + B) - B \cdot N_u\right]} = 1.373144$$

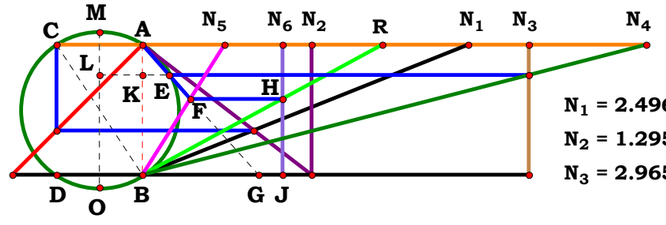
$$Num := \frac{N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{C \cdot D \cdot \left[D \cdot (A + B) - B \cdot N_u\right]}{\sqrt{\left[C \cdot D \cdot \left[D \cdot (A + B) - B \cdot N_u\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{C^2 \cdot D^2 \cdot \left[D \cdot (A + B) - B \cdot N_u\right]^2}}{C \cdot D \cdot \left[D \cdot (A + B) - B \cdot N_u\right] \cdot \sqrt{N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$



$N_1 = 2.49634$ $N_4 = 3.86440$

$N_2 = 1.29530$ $N_5 = 0.62958$

$N_3 = 2.96599$ $N_6 = 1.07618$

$R = 1.83953$

Unit. $AB := 1$ **Given.** $N_1 := 2.49634$ $N_2 := 1.29530$ $N_3 := 2.96599$

$N_4 := 3.86440$ $N_5 := .62958$ $N_6 := 1.07618$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u \cdot \left[E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} + \left[2 \cdot N_u \cdot (C-D) \cdot (A+B) - B \cdot C \cdot E\right]\right]}{E \cdot F \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right]} = 1.839537$$

$$Num := \frac{N_u \cdot \left[E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} + \left[2 \cdot N_u \cdot (C-D) \cdot (A+B) - B \cdot C \cdot E\right]\right]}{\sqrt{\left[N_u \cdot \left[E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} + \left[2 \cdot N_u \cdot (C-D) \cdot (A+B) - B \cdot C \cdot E\right]\right]\right]^2}}$$

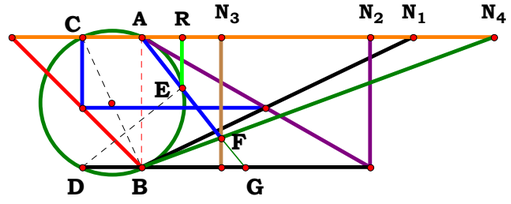
$$Den := \frac{E \cdot F \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right]}{\sqrt{\left[E \cdot F \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{E^2 \cdot F^2 \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right]^2} \cdot \left[E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} + 2 \cdot N_u \cdot (A+B) \cdot (C-D) - B \cdot C \cdot E\right]}{E \cdot F \cdot \sqrt{N_u^2 \cdot \left[E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} + 2 \cdot N_u \cdot (A+B) \cdot (C-D) - B \cdot C \cdot E\right]^2} \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - B \cdot C\right]} = 0$$

4RST2B4R0



$N_1 = 2.07985$
$N_2 = 1.75053$
$N_3 = 0.61234$
$N_4 = 2.70210$
$R = 0.31057$

Unit. $AB := 1$ Given. $N_1 := 2.07985$ $N_2 := 1.75053$ $N_3 := .61234$ $N_4 := 2.70210$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left[(C - D) \cdot (A + B) - A \cdot N_u \right]}{(A + B) \cdot \left[(C - D)^2 + N_u{}^2 \right]} = 0.310572$$

$$Num := \frac{N_u \cdot \left[(C - D) \cdot (A + B) - A \cdot N_u \right]}{\sqrt{\left[N_u \cdot \left[(C - D) \cdot (A + B) - A \cdot N_u \right] \right]^2}}$$

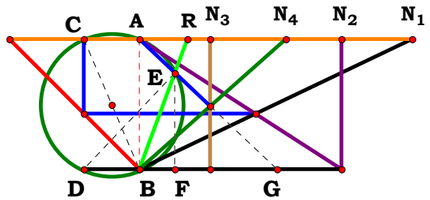
$$Den := \frac{(A + B) \cdot \left[(C - D)^2 + N_u{}^2 \right]}{\sqrt{\left[(A + B) \cdot \left[(C - D)^2 + N_u{}^2 \right] \right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[(A + B) \cdot (C - D) - A \cdot N_u \right] \cdot \sqrt{(A + B)^2 \cdot \left[N_u{}^2 + (C - D)^2 \right]^2}}{\sqrt{N_u{}^2 \cdot \left[(A + B) \cdot (C - D) - A \cdot N_u \right]^2} \cdot (A + B) \cdot \left[N_u{}^2 + (C - D)^2 \right]} = 0$$

4RST2B4R1



$N_1 = 2.08954$
$N_2 = 1.54713$
$N_3 = 0.54454$
$N_4 = 1.12332$
$R = 0.37131$

Unit. $AB := 1$ **Given.** $N_1 := 2.08954$ $N_2 := 1.54713$ $N_3 := .54454$

$N_4 := 1.12332$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{(C-D)\cdot(A+B)-A\cdot N_u}{A\cdot(C-D)+N_u\cdot(A+B)} = 0.371306$$

$$Num := \frac{(C-D)\cdot(A+B)-A\cdot N_u}{\sqrt{\left[(C-D)\cdot(A+B)-A\cdot N_u\right]^2}}$$

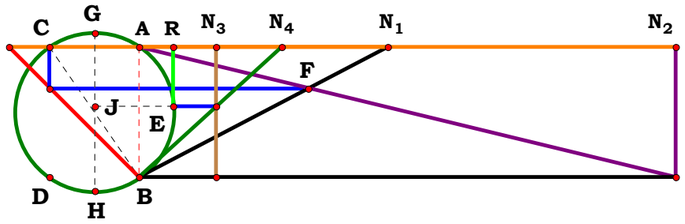
$$Den := \frac{A\cdot(C-D)+N_u\cdot(A+B)}{\sqrt{\left[A\cdot(C-D)+N_u\cdot(A+B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left[N_u\cdot(A+B)+A\cdot(C-D)\right]^2}\cdot\left[(A+B)\cdot(C-D)-A\cdot N_u\right]}{\sqrt{\left[(A+B)\cdot(C-D)-A\cdot N_u\right]^2}\cdot\left[N_u\cdot(A+B)+A\cdot(C-D)\right]} = 0$$

4RST2B4R2



$N_1 = 1.90551$
$N_2 = 4.11387$
$N_3 = 0.59297$
$N_4 = 1.09426$
$R = 0.26245$

Unit. $AB := 1$ Given. $N_1 := 1.90551$ $N_2 := 4.11387$ $N_3 := .59297$

$N_4 := 1.09426$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C}{2 \cdot (A+B) \cdot C} = 0.262447$$

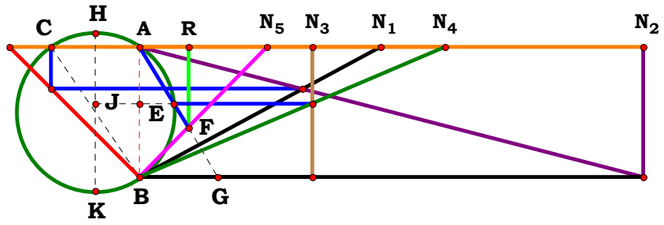
$$Num := \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C}{\sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C\right]^2}}$$

$$Den := \frac{2 \cdot (A+B) \cdot C}{\sqrt{[2 \cdot (A+B) \cdot C]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C\right] \cdot \sqrt{C^2 \cdot (2 \cdot A + 2 \cdot B)^2}}{C \cdot \sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C\right]^2} \cdot (2 \cdot A + 2 \cdot B)} = 0$$



$N_1 = 1.84739$
$N_2 = 3.86203$
$N_3 = 1.32909$
$N_4 = 2.34373$
$N_5 = 0.97826$
$R = 0.37362$

Unit. $AB := 1$ Given. $N_1 := 1.84739$ $N_2 := 3.86203$ $N_3 := 1.32909$

$N_4 := 2.34373$ $N_5 := .97826$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u\cdot\left[A\cdot C-\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}\right]}{A\cdot C\cdot E-E\cdot\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}-2\cdot N_u\cdot(C-D)\cdot(A+B)}=0.37362$$

$$Num:=\frac{N_u\cdot\left[A\cdot C-\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}\right]}{\sqrt{\left[N_u\cdot\left[A\cdot C-\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}\right]\right]^2}}$$

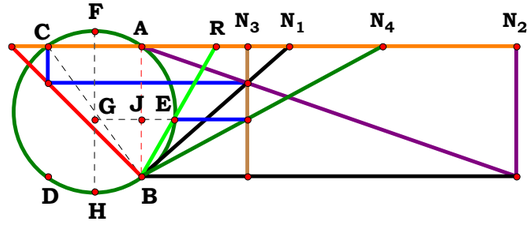
$$Den:=\frac{A\cdot C\cdot E-E\cdot\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}-2\cdot N_u\cdot(C-D)\cdot(A+B)}{\sqrt{\left[A\cdot C\cdot E-E\cdot\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}-2\cdot N_u\cdot(C-D)\cdot(A+B)\right]^2}}$$

$$L:=\frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L-\frac{N_u\cdot\left[A\cdot C-\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}\right]\cdot\sqrt{\left[A\cdot C\cdot E-E\cdot\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}-2\cdot N_u\cdot(C-D)\cdot(A+B)\right]^2}}{\sqrt{N_u{}^2\cdot\left[A\cdot C-\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}\right]^2}\cdot\left[A\cdot C\cdot E-E\cdot\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}-2\cdot N_u\cdot(C-D)\cdot(A+B)\right]}=0$$

4RST2B4R4



$N_1 = 1.13064$
$N_2 = 2.87408$
$N_3 = 0.81574$
$N_4 = 1.84976$
$R = 0.57544$

Unit. $AB := 1$ Given. $N_1 := 1.13064$ $N_2 := 2.87408$ $N_3 := .81574$

$N_4 := 1.84976$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

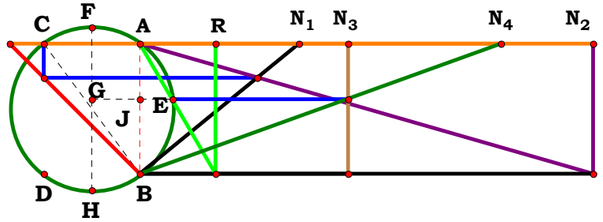
$$\frac{\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C}{2 \cdot (A+B) \cdot D} = 0.575437$$

$$Num := \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C}{\sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C\right]^2}} \qquad Den := \frac{2 \cdot (A+B) \cdot D}{\sqrt{[2 \cdot (A+B) \cdot D]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C\right] \cdot \sqrt{D^2 \cdot (2 \cdot A + 2 \cdot B)^2}}{D \cdot \sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C\right]^2} \cdot (2 \cdot A + 2 \cdot B)} = 0$$

4RST2B4R5



$N_1 = 1.21782$
$N_2 = 3.47460$
$N_3 = 1.60029$
$N_4 = 2.76991$
$R = 0.58505$

Unit. $AB := 1$ Given. $N_1 := 1.21782$ $N_2 := 3.47460$ $N_3 := 1.60029$

$N_4 := 2.76991$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C}{2 \cdot (A+B) \cdot (C-D)} = 0.585047$$

$$Num := \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C}{\sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C\right]^2}}$$

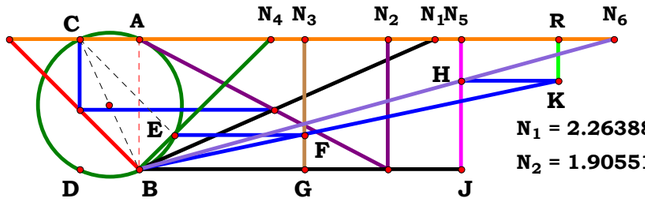
$$Den := \frac{2 \cdot (A+B) \cdot (C-D)}{\sqrt{[2 \cdot (A+B) \cdot (C-D)]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{(2 \cdot A + 2 \cdot B)^2 \cdot (C-D)^2} \cdot \left[\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C\right]}{\sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot D \cdot (A+B)^2 \cdot (C-D)} - A \cdot C\right]^2} \cdot (2 \cdot A + 2 \cdot B) \cdot (C-D)} = 0$$

4RST2B6R6



$N_1 = 2.26388$
$N_2 = 1.90551$
$N_3 = 1.27097$
$N_4 = 1.00709$
$N_5 = 2.46987$
$N_6 = 3.64185$
$R = 3.21676$

Unit. $AB := 1$ Given. $N_1 := 2.26388$ $N_2 := 1.90551$ $N_3 := 1.27097$ $N_4 := 1.00709$ $N_5 := 2.46987$ $N_6 := 3.64185$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{F \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{C \cdot D \cdot E \cdot \left[D \cdot (A + B) - A \cdot N_u\right]} = 3.216733$$

$$Num := \frac{F \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[F \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

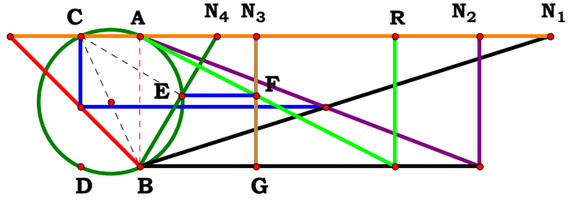
$$Den := \frac{C \cdot D \cdot E \cdot \left[D \cdot (A + B) - A \cdot N_u\right]}{\sqrt{\left[C \cdot D \cdot E \cdot \left[D \cdot (A + B) - A \cdot N_u\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{F \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{C^2 \cdot D^2 \cdot E^2 \cdot \left[D \cdot (A + B) - A \cdot N_u\right]^2}}{C \cdot D \cdot E \cdot \left[D \cdot (A + B) - A \cdot N_u\right] \cdot \sqrt{F^2 \cdot N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST2B4R7



$N_1 = 3.14529$
$N_2 = 2.60288$
$N_3 = 0.89323$
$N_4 = 0.59060$
$R = 1.95505$

Unit. $AB := 1$ Given. $N_1 := 3.14529$ $N_2 := 2.60288$ $N_3 := .89323$ $N_4 := .59060$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\left(D^2 + N_u{}^2\right)\cdot(A+B)}{A\cdot C\cdot D + C\cdot N_u\cdot(A+B)} = 1.955066$$

$$Num := \frac{\left(D^2 + N_u{}^2\right)\cdot(A+B)}{\sqrt{\left[\left(D^2 + N_u{}^2\right)\cdot(A+B)\right]^2}}$$

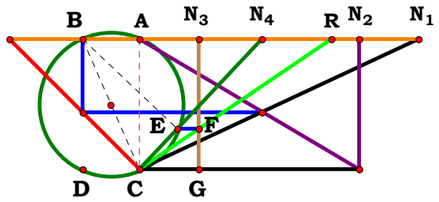
$$Den := \frac{A\cdot C\cdot D + C\cdot N_u\cdot(A+B)}{\sqrt{\left[A\cdot C\cdot D + C\cdot N_u\cdot(A+B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left(D^2 + N_u{}^2\right)\cdot(A+B)\cdot\sqrt{\left[C\cdot N_u\cdot(A+B) + A\cdot C\cdot D\right]^2}}{\left[C\cdot N_u\cdot(A+B) + A\cdot C\cdot D\right]\cdot\sqrt{\left(D^2 + N_u{}^2\right)^2\cdot(A+B)^2}} = 0$$

4RST2B4R8



$N_1 = 2.13797$
$N_2 = 1.68273$
$N_3 = 0.45737$
$N_4 = 0.93929$
$R = 1.46831$

Unit. $AB := 1$ Given. $N_1 := 2.13797$ $N_2 := 1.68273$ $N_3 := .45737$

$N_4 := .93929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{C \cdot D \cdot \left[D \cdot (A + B) - A \cdot N_u\right]} = 1.468313$$

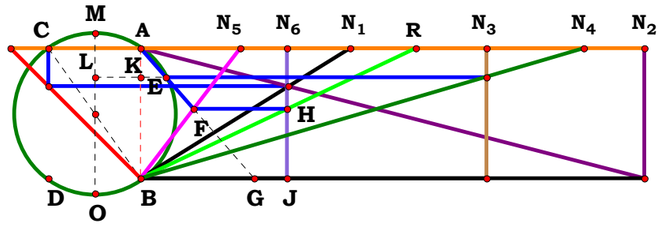
$$Num := \frac{N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{C \cdot D \cdot \left[D \cdot (A + B) - A \cdot N_u\right]}{\sqrt{\left[C \cdot D \cdot \left[D \cdot (A + B) - A \cdot N_u\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{C^2 \cdot D^2 \cdot \left[D \cdot (A + B) - A \cdot N_u\right]^2}}{C \cdot D \cdot \left[D \cdot (A + B) - A \cdot N_u\right] \cdot \sqrt{N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$



$N_1 = 1.60525$ $N_4 = 3.39948$

$N_2 = 3.86203$ $N_5 = 0.76518$

$N_3 = 2.65604$ $N_6 = 1.12355$

$R = 2.11046$

Unit. $AB := 1$ Given. $N_1 := 1.60525$ $N_2 := 3.86203$ $N_3 := 2.65604$

$N_4 := 3.39948$ $N_5 := .76518$ $N_6 := 1.12355$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u\cdot\left[A\cdot C\cdot E - E\cdot\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)} - 2\cdot N_u\cdot(C-D)\cdot(A+B)\right]}{E\cdot F\cdot\left[A\cdot C-\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}\right]} = 2.110458$$

$$Num := \frac{N_u\cdot\left[A\cdot C\cdot E - E\cdot\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)} - 2\cdot N_u\cdot(C-D)\cdot(A+B)\right]}{\sqrt{\left[N_u\cdot\left[A\cdot C\cdot E - E\cdot\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)} - 2\cdot N_u\cdot(C-D)\cdot(A+B)\right]\right]^2}}$$

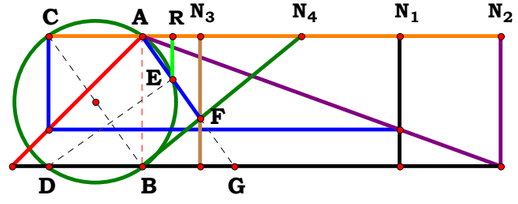
$$Den := \frac{E\cdot F\cdot\left[A\cdot C-\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}\right]}{\sqrt{\left[E\cdot F\cdot\left[A\cdot C-\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u\cdot\sqrt{E^2\cdot F^2\cdot\left[A\cdot C-\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}\right]^2}\cdot\left[A\cdot C\cdot E - E\cdot\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)} - 2\cdot N_u\cdot(C-D)\cdot(A+B)\right]}{E\cdot F\cdot\sqrt{N_u^2\cdot\left[A\cdot C\cdot E - E\cdot\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)} - 2\cdot N_u\cdot(C-D)\cdot(A+B)\right]^2}\cdot\left[A\cdot C-\sqrt{A^2\cdot C^2+4\cdot D\cdot(A+B)^2\cdot(C-D)}\right]} = 0$$

4RST2B5R0



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 0.44768$
$N_4 = 1.22018$
R = 0.23205

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := .44768$

$N_4 := 1.22018$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left[A \cdot (C - D) - B \cdot N_u\right]}{A \cdot \left[(C - D)^2 + N_u{}^2\right]} = 0.232053$$

$$Num := \frac{N_u \cdot \left[A \cdot (C - D) - B \cdot N_u\right]}{\sqrt{\left[N_u \cdot \left[A \cdot (C - D) - B \cdot N_u\right]\right]^2}}$$

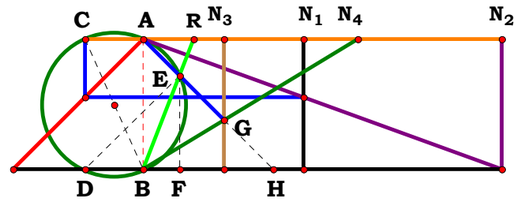
$$Den := \frac{A \cdot \left[(C - D)^2 + N_u{}^2\right]}{\sqrt{\left[A \cdot \left[(C - D)^2 + N_u{}^2\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[A \cdot (C - D) - B \cdot N_u\right] \cdot \sqrt{A^2 \cdot \left[N_u{}^2 + (C - D)^2\right]^2}}{A \cdot \left[N_u{}^2 + (C - D)^2\right] \cdot \sqrt{N_u{}^2 \cdot \left[A \cdot (C - D) - B \cdot N_u\right]^2}} = 0$$

4RST2B5R1



$N_1 = 1.22750$
$N_2 = 2.74817$
$N_3 = 0.62203$
$N_4 = 1.64635$
$R = 0.38264$

Unit. $AB := 1$ **Given.** $N_1 := 1.22750$ $N_2 := 2.74817$ $N_3 := .62203$ $N_4 := 1.64635$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A\cdot(C-D)-B\cdot N_u}{B\cdot(C-D)+A\cdot N_u} = 0.382629$$

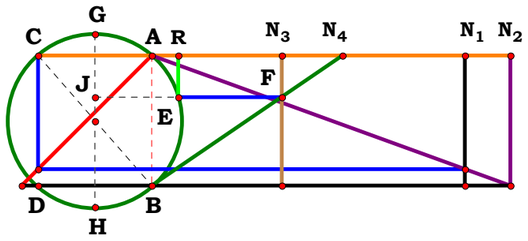
$$Num := \frac{A\cdot(C-D)-B\cdot N_u}{\sqrt{\left[A\cdot(C-D)-B\cdot N_u\right]^2}}$$

$$Den := \frac{B\cdot(C-D)+A\cdot N_u}{\sqrt{\left[B\cdot(C-D)+A\cdot N_u\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[A\cdot(C-D)-B\cdot N_u\right]\cdot\sqrt{\left[A\cdot N_u+B\cdot(C-D)\right]^2}}{\left[A\cdot N_u+B\cdot(C-D)\right]\cdot\sqrt{\left[A\cdot(C-D)-B\cdot N_u\right]^2}} = 0$$



$N_1 = 2.39948$
$N_2 = 2.74817$
$N_3 = 0.99977$
$N_4 = 1.46232$
$R = 0.20128$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 2.74817$ $N_3 := .99977$

$N_4 := 1.46232$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C}{2 \cdot A \cdot C} = 0.201283$$

$$Num := \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C}{\sqrt{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]^2}}$$

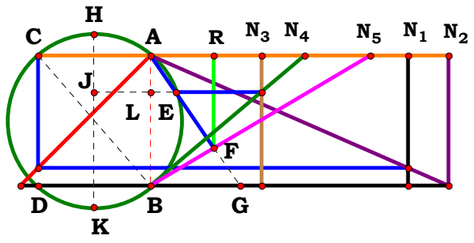
$$Den := \frac{2 \cdot A \cdot C}{\sqrt{(2 \cdot A \cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A^2 \cdot C^2} \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]}{A \cdot C \cdot \sqrt{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]^2}} = 0$$

4RST2B5R3



$N_1 = 1.97331$
$N_2 = 2.28325$
$N_3 = 0.85448$
$N_4 = 1.18144$
$N_5 = 1.68533$
$R = 0.48761$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.28325$ $N_3 := .85448$ $N_4 := 1.18144$ $N_5 := 1.68533$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]}{E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} + 2 \cdot N_u \cdot A \cdot (C - D) - B \cdot C \cdot E} = 0.487604$$

$$Num := \frac{N_u \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]}{\sqrt{\left[N_u \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]\right]^2}}$$

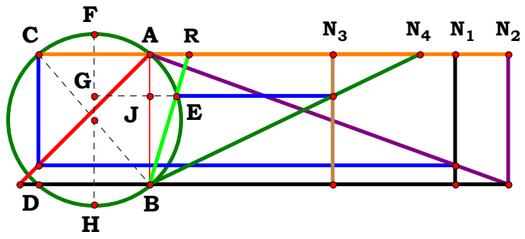
$$Den := \frac{E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} + 2 \cdot N_u \cdot A \cdot (C - D) - B \cdot C \cdot E}{\sqrt{\left[E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} + 2 \cdot N_u \cdot A \cdot (C - D) - B \cdot C \cdot E\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C \cdot E + 2 \cdot A \cdot N_u \cdot (C - D)\right]^2} \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]}{\sqrt{N_u^2 \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]^2} \cdot \left[E \cdot \sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C \cdot E + 2 \cdot A \cdot N_u \cdot (C - D)\right]} = 0$$

4RST2B5R4



$N_1 = 2.34137$
$N_2 = 2.74817$
$N_3 = 1.40657$
$N_4 = 2.07253$
$R = 0.30369$

Unit. $AB := 1$ Given. $N_1 := 2.34137$ $N_2 := 2.74817$ $N_3 := 1.40657$

$N_4 := 2.07253$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C}{2 \cdot A \cdot D} = 0.303689$$

$$Num := \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C}{\sqrt{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]^2}}$$

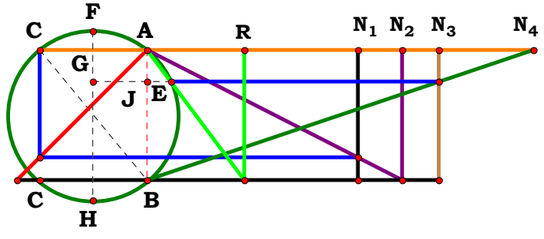
$$Den := \frac{2 \cdot A \cdot D}{\sqrt{(2 \cdot A \cdot D)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A^2 \cdot D^2} \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]}{A \cdot D \cdot \sqrt{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]^2}} = 0$$

4RST2B5R5



$N_1 = 1.61493$
$N_2 = 1.95394$
$N_3 = 2.23955$
$N_4 = 2.96362$
$R = 0.74864$

Unit. $AB := 1$ Given. $N_1 := 1.61493$ $N_2 := 1.95394$ $N_3 := 2.23955$ $N_4 := 2.96362$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C}{2 \cdot A \cdot (C - D)} = 0.748639$$

$$Num := \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C}{\sqrt{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]^2}}$$

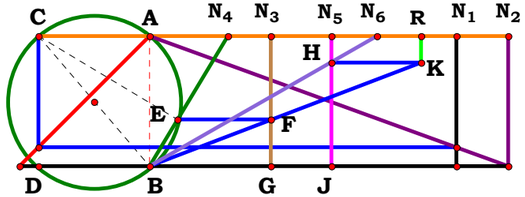
$$Den := \frac{2 \cdot A \cdot (C - D)}{\sqrt{[2 \cdot A \cdot (C - D)]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A^2 \cdot (C - D)^2} \cdot \left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]}{A \cdot \sqrt{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot D \cdot (C - D)} - B \cdot C\right]^2} \cdot (C - D)} = 0$$

4RST2B5R6



$N_1 = 2.35105$ $N_5 = 1.39475$

$N_2 = 2.74817$ $N_6 = 1.74344$

$N_3 = 0.93197$ $R = 2.08498$

$N_4 = 0.60029$

Unit. $AB := 1$ Given. $N_1 := 2.35105$ $N_2 := 2.74817$ $N_3 := .93197$

$N_4 := .60029$ $N_5 := 1.39475$ $N_6 := 1.74344$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{A \cdot F \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{C \cdot D \cdot E \cdot \left(A \cdot D - B \cdot N_u\right)} = 2.084969$$

$$Num := \frac{A \cdot F \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot F \cdot N_u \cdot \left(D^2 + N_u{}^2\right)\right]^2}}$$

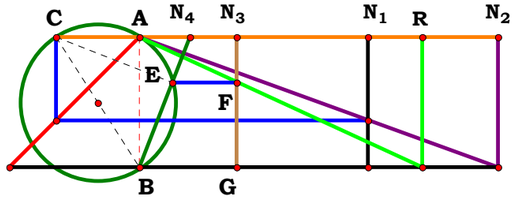
$$Den := \frac{C \cdot D \cdot E \cdot \left(A \cdot D - B \cdot N_u\right)}{\sqrt{\left[C \cdot D \cdot E \cdot \left(A \cdot D - B \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot F \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot \sqrt{C^2 \cdot D^2 \cdot E^2 \cdot \left(A \cdot D - B \cdot N_u\right)^2}}{C \cdot D \cdot E \cdot \left(A \cdot D - B \cdot N_u\right) \cdot \sqrt{A^2 \cdot F^2 \cdot N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2}} = 0$$

4RST2B5R7



$N_1 = 1.75053$
$N_2 = 2.74817$
$N_3 = 0.74794$
$N_4 = 0.38720$
$R = 2.16881$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := 2.74817$ $N_3 := .74794$

$N_4 := .38720$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A\cdot\left(D^2+N_u{}^2\right)}{C\cdot\left(B\cdot D+A\cdot N_u\right)}=2.168823$$

$$Num := \frac{A\cdot\left(D^2+N_u{}^2\right)}{\sqrt{\left[A\cdot\left(D^2+N_u{}^2\right)\right]^2}}$$

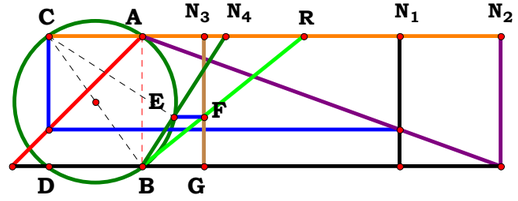
$$Den := \frac{C\cdot\left(B\cdot D+A\cdot N_u\right)}{\sqrt{\left[C\cdot\left(B\cdot D+A\cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{A\cdot\left(D^2+N_u{}^2\right)\cdot\sqrt{C^2\cdot\left(B\cdot D+A\cdot N_u\right)^2}}{C\cdot\sqrt{A^2\cdot\left(D^2+N_u{}^2\right)^2}\cdot\left(B\cdot D+A\cdot N_u\right)}=0$$

4RST2B5R8



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 0.47674$
$N_4 = 0.63903$
$R = 1.24074$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := .47674$ $N_4 := .63903$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{C \cdot D \cdot \left(A \cdot D - B \cdot N_u\right)} = 1.240736$$

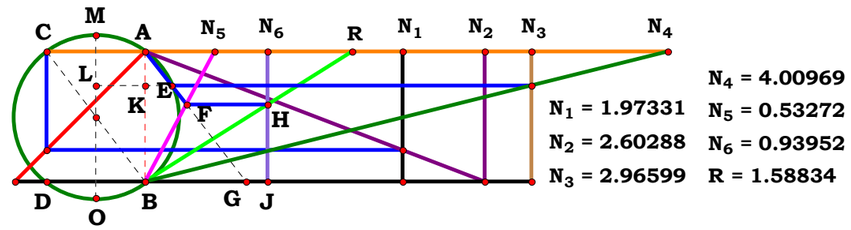
$$Num := \frac{A \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(D^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{C \cdot D \cdot \left(A \cdot D - B \cdot N_u\right)}{\sqrt{\left[C \cdot D \cdot \left(A \cdot D - B \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot \sqrt{C^2 \cdot D^2 \cdot \left(A \cdot D - B \cdot N_u\right)^2}}{C \cdot D \cdot \left(A \cdot D - B \cdot N_u\right) \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2}} = 0$$



$N_4 = 4.00969$ $N_5 = 0.53272$ $N_6 = 0.93952$

$N_1 = 1.97331$ $N_2 = 2.60288$ $N_3 = 2.96599$ $R = 1.58834$

Unit. $AB := 1$ **Given.** $N_1 := 1.97331$ $N_2 := 2.60288$ $N_3 := 2.96599$

$N_4 := 4.00969$ $N_5 := .53272$ $N_6 := .93952$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u\cdot\left[E\cdot\sqrt{B^2\cdot C^2+4\cdot A^2\cdot D\cdot(C-D)}+2\cdot N_u\cdot A\cdot(C-D)-B\cdot C\cdot E\right]}{E\cdot F\cdot\left[\sqrt{B^2\cdot C^2+4\cdot A^2\cdot D\cdot(C-D)}-B\cdot C\right]} = 1.588344$$

$$Num := \frac{N_u\cdot\left[E\cdot\sqrt{B^2\cdot C^2+4\cdot A^2\cdot D\cdot(C-D)}+2\cdot N_u\cdot A\cdot(C-D)-B\cdot C\cdot E\right]}{\sqrt{\left[N_u\cdot\left[E\cdot\sqrt{B^2\cdot C^2+4\cdot A^2\cdot D\cdot(C-D)}+2\cdot N_u\cdot A\cdot(C-D)-B\cdot C\cdot E\right]\right]^2}}$$

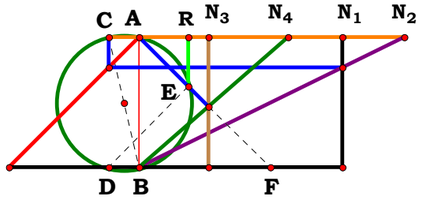
$$Den := \frac{E\cdot F\cdot\left[\sqrt{B^2\cdot C^2+4\cdot A^2\cdot D\cdot(C-D)}-B\cdot C\right]}{\sqrt{\left[E\cdot F\cdot\left[\sqrt{B^2\cdot C^2+4\cdot A^2\cdot D\cdot(C-D)}-B\cdot C\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{N_u\cdot\left[E\cdot\sqrt{B^2\cdot C^2+4\cdot A^2\cdot D\cdot(C-D)}-B\cdot C\cdot E+2\cdot A\cdot N_u\cdot(C-D)\right]\cdot\sqrt{E^2\cdot F^2\cdot\left[\sqrt{B^2\cdot C^2+4\cdot A^2\cdot D\cdot(C-D)}-B\cdot C\right]^2}}{E\cdot F\cdot\left[\sqrt{B^2\cdot C^2+4\cdot A^2\cdot D\cdot(C-D)}-B\cdot C\right]\cdot\sqrt{N_u{}^2\cdot\left[E\cdot\sqrt{B^2\cdot C^2+4\cdot A^2\cdot D\cdot(C-D)}-B\cdot C\cdot E+2\cdot A\cdot N_u\cdot(C-D)\right]^2}} = 0$$

4RST2B6R0



$N_1 = 1.55682$
$N_2 = 2.03142$
$N_3 = 0.53485$
$N_4 = 1.14269$
$R = 0.38254$

Unit. $AB := 1$ Given. $N_1 := 1.55682$ $N_2 := 2.03142$ $N_3 := .53485$

$N_4 := 1.14269$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left[A \cdot (C - D) - N_u \cdot (A - B)\right]}{A \cdot \left[(C - D)^2 + N_u{}^2\right]} = 0.38254$$

$$Num := \frac{N_u \cdot \left[A \cdot (C - D) - N_u \cdot (A - B)\right]}{\sqrt{\left[N_u \cdot \left[A \cdot (C - D) - N_u \cdot (A - B)\right]\right]^2}}$$

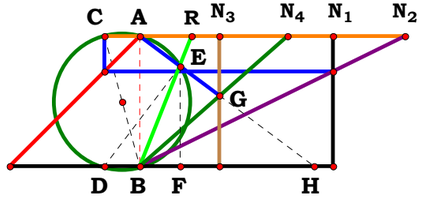
$$Den := \frac{A \cdot \left[(C - D)^2 + N_u{}^2\right]}{\sqrt{\left[A \cdot \left[(C - D)^2 + N_u{}^2\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[A \cdot (C - D) - N_u \cdot (A - B)\right] \cdot \sqrt{A^2 \cdot \left[N_u{}^2 + (C - D)^2\right]^2}}{A \cdot \left[N_u{}^2 + (C - D)^2\right] \cdot \sqrt{N_u{}^2 \cdot \left[A \cdot (C - D) - N_u \cdot (A - B)\right]^2}} = 0$$

4RST2B6R1



$N_1 = 1.47933$
$N_2 = 2.03142$
$N_3 = 0.61234$
$N_4 = 1.13301$
$R = 0.39760$

Unit. $AB := 1$ Given. $N_1 := 1.47933$ $N_2 := 2.03142$ $N_3 := .61234$

$N_4 := 1.13301$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A\cdot(C-D)-N_u\cdot(A-B)}{(C-D)\cdot(A-B)+A\cdot N_u}=0.397604$$

$$Num := \frac{A\cdot(C-D)-N_u\cdot(A-B)}{\sqrt{\left[A\cdot(C-D)-N_u\cdot(A-B)\right]^2}}$$

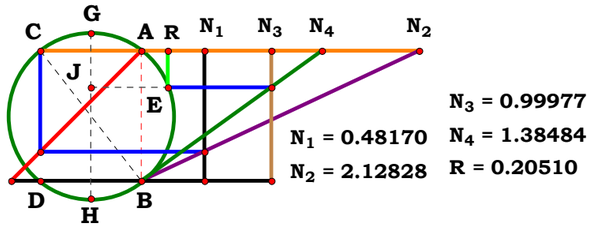
$$Den := \frac{(C-D)\cdot(A-B)+A\cdot N_u}{\sqrt{\left[(C-D)\cdot(A-B)+A\cdot N_u\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[A\cdot(C-D)-N_u\cdot(A-B)\right]\cdot\sqrt{\left[A\cdot N_u+(A-B)\cdot(C-D)\right]^2}}{\left[A\cdot N_u+(A-B)\cdot(C-D)\right]\cdot\sqrt{\left[A\cdot(C-D)-N_u\cdot(A-B)\right]^2}}=0$$

4RST2B6R2



Unit. $AB := 1$ **Given.** $N_1 := .48170$ $N_2 := 2.12828$ $N_3 := .99977$ $N_4 := 1.38484$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4}$$

Descriptions.

$$\frac{\sqrt{A^2\cdot C^2+4\cdot A^2\cdot C\cdot D-4\cdot A^2\cdot D^2-2\cdot A\cdot B\cdot C^2+B^2\cdot C^2}-C\cdot(A-B)}{2\cdot A\cdot C}=0.205098$$

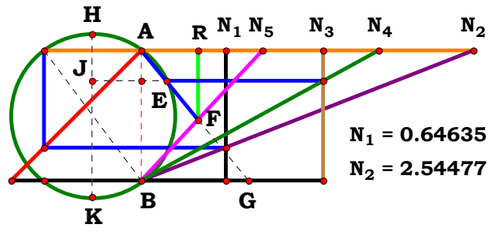
$$Num := \frac{\sqrt{A^2\cdot C^2+4\cdot A^2\cdot C\cdot D-4\cdot A^2\cdot D^2-2\cdot A\cdot B\cdot C^2+B^2\cdot C^2}-C\cdot(A-B)}{\sqrt{\left[\sqrt{A^2\cdot C^2+4\cdot A^2\cdot C\cdot D-4\cdot A^2\cdot D^2-2\cdot A\cdot B\cdot C^2+B^2\cdot C^2}-C\cdot(A-B)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot C}{\sqrt{(2\cdot A\cdot C)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{A^2\cdot C^2}\cdot\left[\sqrt{A^2\cdot C^2+4\cdot A^2\cdot C\cdot D-4\cdot A^2\cdot D^2-2\cdot A\cdot B\cdot C^2+B^2\cdot C^2}-C\cdot(A-B)\right]}{A\cdot C\cdot\sqrt{\left[\sqrt{A^2\cdot C^2+4\cdot A^2\cdot C\cdot D-4\cdot A^2\cdot D^2-2\cdot A\cdot B\cdot C^2+B^2\cdot C^2}-C\cdot(A-B)\right]^2}}=0$$

4RST2B6R3



$N_3 = 1.39689$
$N_4 = 1.82070$
$N_5 = 0.92984$
$R = 0.43548$
$N_1 = 0.64635$
$N_2 = 2.54477$

Unit. $AB := 1$ Given. $N_1 := .64635$ $N_2 := 2.54477$ $N_3 := 1.39689$

$N_4 := 1.82070$ $N_5 := .92984$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left[A \cdot C - \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - B \cdot C\right]}{C \cdot E \cdot (A-B) - 2 \cdot A \cdot N_u \cdot (C-D) - E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)}} = 0.435482$$

$$Num := \frac{N_u \cdot \left[A \cdot C - \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - B \cdot C\right]}{\sqrt{\left[N_u \cdot \left[A \cdot C - \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - B \cdot C\right]\right]^2}}$$

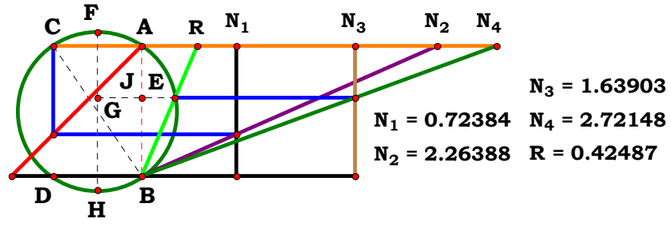
$$Den := \frac{C \cdot E \cdot (A-B) - 2 \cdot A \cdot N_u \cdot (C-D) - E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)}}{\sqrt{\left[C \cdot E \cdot (A-B) - 2 \cdot A \cdot N_u \cdot (C-D) - E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - C \cdot E \cdot (A-B) + 2 \cdot A \cdot N_u \cdot (C-D)\right]^2} \cdot \left[\sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - A \cdot C + B \cdot C\right]}{\sqrt{N_u^2 \cdot \left[\sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - A \cdot C + B \cdot C\right]^2} \cdot \left[E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - C \cdot E \cdot (A-B) + 2 \cdot A \cdot N_u \cdot (C-D)\right]} = 0$$

4RST2B6R4



Unit. $AB := 1$ Given. $N_1 := .72384$ $N_2 := 2.26388$ $N_3 := 1.63903$

$N_4 := 2.72148$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{C^2\cdot(A-B)^2+4\cdot A^2\cdot D\cdot(C-D)}-C\cdot(A-B)}{2\cdot A\cdot D}=0.424872$$

$$Num := \frac{\sqrt{C^2\cdot(A-B)^2+4\cdot A^2\cdot D\cdot(C-D)}-C\cdot(A-B)}{\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+4\cdot A^2\cdot D\cdot(C-D)}-C\cdot(A-B)\right]^2}}$$

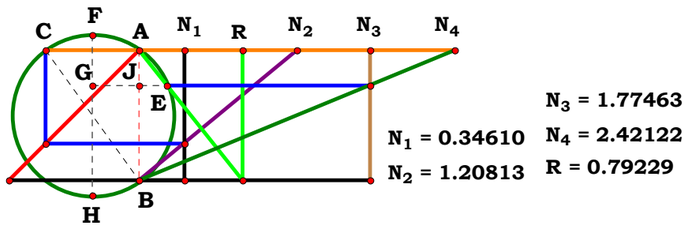
$$Den := \frac{2\cdot A\cdot D}{\sqrt{(2\cdot A\cdot D)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{A^2\cdot D^2}\cdot\left[\sqrt{C^2\cdot(A-B)^2+4\cdot A^2\cdot D\cdot(C-D)}-C\cdot(A-B)\right]}{A\cdot D\cdot\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+4\cdot A^2\cdot D\cdot(C-D)}-C\cdot(A-B)\right]^2}}=0$$

4RST2B6R5



Unit. $AB := 1$ **Given.** $N_1 := .34610$ $N_2 := 1.20813$ $N_3 := 1.77463$ $N_4 := 2.42122$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{C^2\cdot(A-B)^2+4\cdot A^2\cdot D\cdot(C-D)}-C\cdot(A-B)}{2\cdot A\cdot(C-D)}=0.792287$$

$$Num := \frac{\sqrt{C^2\cdot(A-B)^2+4\cdot A^2\cdot D\cdot(C-D)}-C\cdot(A-B)}{\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+4\cdot A^2\cdot D\cdot(C-D)}-C\cdot(A-B)\right]^2}}$$

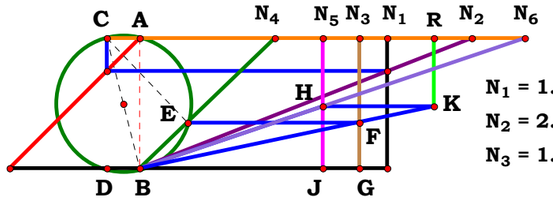
$$Den := \frac{2\cdot A\cdot(C-D)}{\sqrt{[2\cdot A\cdot(C-D)]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L-\frac{\sqrt{A^2\cdot(C-D)^2}\cdot\left[\sqrt{C^2\cdot(A-B)^2+4\cdot A^2\cdot D\cdot(C-D)}-C\cdot(A-B)\right]}{A\cdot\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+4\cdot A^2\cdot D\cdot(C-D)}-C\cdot(A-B)\right]^2}\cdot(C-D)}=0$$

4RST2B6R6



$N_1 = 1.89582$
$N_2 = 2.54477$
$N_3 = 1.68746$

$N_4 = 1.03615$
$N_5 = 1.40444$
$N_6 = 2.95416$
$R = 2.26093$

Unit. $AB := 1$ Given. $N_1 := 1.89582$ $N_2 := 2.54477$ $N_3 := 1.68746$

$N_4 := 1.03615$ $N_5 := 1.40444$ $N_6 := 2.95416$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{A \cdot F \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{C \cdot D \cdot E \cdot \left[A \cdot D - N_u \cdot (A - B)\right]} = 2.260935$$

$$Num := \frac{A \cdot F \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot F \cdot N_u \cdot \left(D^2 + N_u{}^2\right)\right]^2}}$$

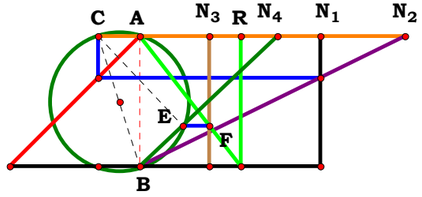
$$Den := \frac{C \cdot D \cdot E \cdot \left[A \cdot D - N_u \cdot (A - B)\right]}{\sqrt{\left[C \cdot D \cdot E \cdot \left[A \cdot D - N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot F \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot \sqrt{C^2 \cdot D^2 \cdot E^2 \cdot \left[A \cdot D - N_u \cdot (A - B)\right]^2}}{C \cdot D \cdot E \cdot \left[A \cdot D - N_u \cdot (A - B)\right] \cdot \sqrt{A^2 \cdot F^2 \cdot N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2}} = 0$$

4RST2B6R7



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.53485$
$N_4 = 1.05552$
$R = 0.77912$

Unit. $AB := 1$ **Given.** $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .53485$

$N_4 := 1.05552$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A\cdot\left(D^2+N_u{}^2\right)}{C\cdot\left[D\cdot(A-B)+A\cdot N_u\right]} = 0.779113$$

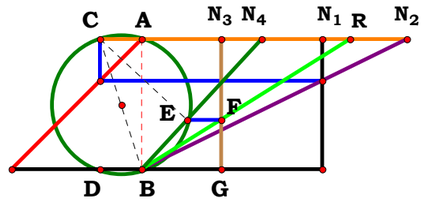
$$Num := \frac{A\cdot\left(D^2+N_u{}^2\right)}{\sqrt{\left[A\cdot\left(D^2+N_u{}^2\right)\right]^2}}$$

$$Den := \frac{C\cdot\left[D\cdot(A-B)+A\cdot N_u\right]}{\sqrt{\left[C\cdot\left[D\cdot(A-B)+A\cdot N_u\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A\cdot\left(D^2+N_u{}^2\right)\cdot\sqrt{C^2\cdot\left[A\cdot N_u+D\cdot(A-B)\right]^2}}{C\cdot\left[A\cdot N_u+D\cdot(A-B)\right]\cdot\sqrt{A^2\cdot\left(D^2+N_u{}^2\right)^2}} = 0$$



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.61234$
$N_4 = 0.91992$
$R = 1.60104$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .61234$

$N_4 := .91992$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{C \cdot D \cdot \left[A \cdot D - N_u \cdot (A - B)\right]} = 1.601038$$

$$Num := \frac{A \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(D^2 + N_u{}^2\right)\right]^2}}$$

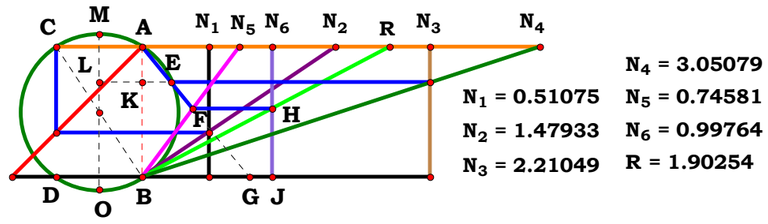
$$Den := \frac{C \cdot D \cdot \left[A \cdot D - N_u \cdot (A - B)\right]}{\sqrt{\left[C \cdot D \cdot \left[A \cdot D - N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot \sqrt{C^2 \cdot D^2 \cdot \left[A \cdot D - N_u \cdot (A - B)\right]^2}}{C \cdot D \cdot \left[A \cdot D - N_u \cdot (A - B)\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2}} = 0$$

4RST2B6R9



Unit. $AB := 1$ Given. $N_1 := .51075$ $N_2 := 1.47933$ $N_3 := 2.21049$

$N_4 := 3.05079$ $N_5 := .74581$ $N_6 := .99764$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u \cdot \left[A \cdot C \cdot E - E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - B \cdot C \cdot E - 2 \cdot A \cdot N_u \cdot (C-D)\right]}{E \cdot F \cdot \left[A \cdot C - \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - B \cdot C\right]} = 1.902555$$

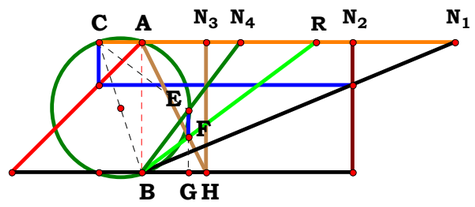
$$Num := \frac{N_u \cdot \left[A \cdot C \cdot E - E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - B \cdot C \cdot E - 2 \cdot A \cdot N_u \cdot (C-D)\right]}{\sqrt{\left[N_u \cdot \left[A \cdot C \cdot E - E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - B \cdot C \cdot E - 2 \cdot A \cdot N_u \cdot (C-D)\right]\right]^2}}$$

$$Den := \frac{E \cdot F \cdot \left[A \cdot C - \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - B \cdot C\right]}{\sqrt{\left[E \cdot F \cdot \left[A \cdot C - \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - B \cdot C\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{E^2 \cdot F^2 \cdot \left[\sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - A \cdot C + B \cdot C\right]^2} \cdot \left[E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - A \cdot C \cdot E + B \cdot C \cdot E + 2 \cdot A \cdot N_u \cdot (C-D)\right]}{E \cdot F \cdot \sqrt{N_u^2 \cdot \left[E \cdot \sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - A \cdot C \cdot E + B \cdot C \cdot E + 2 \cdot A \cdot N_u \cdot (C-D)\right]^2} \cdot \left[\sqrt{C^2 \cdot (A-B)^2 + 4 \cdot A^2 \cdot D \cdot (C-D)} - A \cdot C + B \cdot C\right]} = 0$$

4RST3B1R0



$N_1 = 2.39948$
$N_2 = 1.61493$
$N_3 = 0.49611$
$N_4 = 0.75526$
$R = 1.34142$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.61493$ $N_3 := 0.49611$

$N_4 := .75526$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right]}{B \cdot {N_u}^2 + N_u \cdot C \cdot (B - A) + B \cdot D \cdot (D - C)} = 1.341417$$

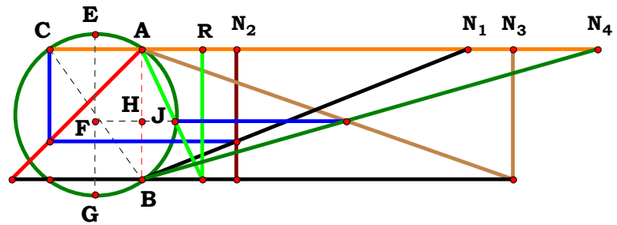
$$Num := \frac{N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right]}{\sqrt{\left[N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right]\right]^2}}$$

$$Den := \frac{B \cdot {N_u}^2 + N_u \cdot C \cdot (B - A) + B \cdot D \cdot (D - C)}{\sqrt{\left[B \cdot {N_u}^2 + N_u \cdot C \cdot (B - A) + B \cdot D \cdot (D - C)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right] \cdot \sqrt{\left[B \cdot {N_u}^2 + N_u \cdot C \cdot (B - A) + B \cdot D \cdot (D - C)\right]^2}}{\sqrt{{N_u}^2 \cdot \left[B \cdot D + N_u \cdot (A - B)\right]^2} \cdot \left[B \cdot {N_u}^2 + N_u \cdot C \cdot (B - A) + B \cdot D \cdot (D - C)\right]} = 0$$

4RST3B1R1



$N_1 = 2.49634$
$N_2 = 0.72384$
$N_3 = 2.84976$
$N_4 = 3.49634$
$R = 0.46480$

Unit. $AB := 1$ Given. $N_1 := 2.49634$ $N_2 := .72384$ $N_3 := 2.84976$ $N_4 := 3.49634$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{(C+D)\cdot(A-B)+\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}}{2\cdot B\cdot C}=0.464804$$

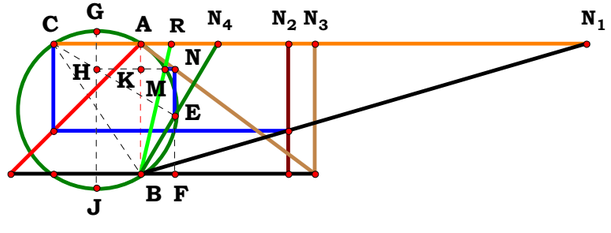
$$Num := \frac{(C+D)\cdot(A-B)+\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}}{\sqrt{\left[(C+D)\cdot(A-B)+\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}\right]^2}}$$

$$Den := \frac{2\cdot B\cdot C}{\sqrt{(2\cdot B\cdot C)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[(C+D)\cdot(A-B)+\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}\right]\cdot\sqrt{B^2\cdot C^2}}{B\cdot C\cdot\sqrt{\left[(C+D)\cdot(A-B)+\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}\right]^2}}=0$$

4RST3B1R2



$N_1 = 3.41649$

$N_2 = 1.13064$

$N_3 = 1.33877$

$N_4 = 0.59060$

$R = 0.23145$

Unit. $AB := 1$ **Given.** $N_1 := 3.41649$ $N_2 := 1.13064$ $N_3 := 1.33877$

$N_4 := .59060$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\left(D^2 + {N_u}^2\right)\cdot(B-A) - \sqrt{\left(D^2 + {N_u}^2\right)^2\cdot(A-B)^2 - 4\cdot C^2\cdot\left[B\cdot D + N_u\cdot(A-B)\right]^2 + 4\cdot B\cdot C\cdot\left(D^2 + {N_u}^2\right)\cdot\left(B\cdot D + A\cdot N_u - B\cdot N_u\right)}}{2\cdot\left(B\cdot C\cdot D - B\cdot {N_u}^2 - B\cdot D^2 + A\cdot C\cdot N_u - B\cdot C\cdot N_u\right)} = 0.23145$$

$$Num := \frac{\left(D^2 + {N_u}^2\right)\cdot(B-A) - \sqrt{\left(D^2 + {N_u}^2\right)^2\cdot(A-B)^2 - 4\cdot C^2\cdot\left[B\cdot D + N_u\cdot(A-B)\right]^2 + 4\cdot B\cdot C\cdot\left(D^2 + {N_u}^2\right)\cdot\left(B\cdot D + A\cdot N_u - B\cdot N_u\right)}}{\sqrt{\left[\left(D^2 + {N_u}^2\right)\cdot(B-A) - \sqrt{\left(D^2 + {N_u}^2\right)^2\cdot(A-B)^2 - 4\cdot C^2\cdot\left[B\cdot D + N_u\cdot(A-B)\right]^2 + 4\cdot B\cdot C\cdot\left(D^2 + {N_u}^2\right)\cdot\left(B\cdot D + A\cdot N_u - B\cdot N_u\right)}\right]^2}}$$

$$Den := \frac{2\cdot\left(B\cdot C\cdot D - B\cdot {N_u}^2 - B\cdot D^2 + A\cdot C\cdot N_u - B\cdot C\cdot N_u\right)}{\sqrt{\left[2\cdot\left(B\cdot C\cdot D - B\cdot {N_u}^2 - B\cdot D^2 + A\cdot C\cdot N_u - B\cdot C\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{\sqrt{\left(2\cdot B\cdot D^2 + 2\cdot B\cdot {N_u}^2 - 2\cdot B\cdot C\cdot D - 2\cdot A\cdot C\cdot N_u + 2\cdot B\cdot C\cdot N_u\right)^2}\cdot\left[\left(D^2 + {N_u}^2\right)\cdot(A-B) + \sqrt{\left(D^2 + {N_u}^2\right)^2\cdot(A-B)^2 - 4\cdot C^2\cdot\left[B\cdot D + N_u\cdot(A-B)\right]^2 \ \ldots \\ + \ 4\cdot B\cdot C\cdot\left(D^2 + {N_u}^2\right)\cdot\left(B\cdot D + A\cdot N_u - B\cdot N_u\right)}\right]}{\sqrt{\left[\left(D^2 + {N_u}^2\right)\cdot(A-B) + \sqrt{\left(D^2 + {N_u}^2\right)^2\cdot(A-B)^2 - 4\cdot C^2\cdot\left[B\cdot D + N_u\cdot(A-B)\right]^2 \ \ldots \\ + \ 4\cdot B\cdot C\cdot\left(D^2 + {N_u}^2\right)\cdot\left(B\cdot D + A\cdot N_u - B\cdot N_u\right)}\right]^2}\cdot\left(2\cdot B\cdot D^2 + 2\cdot B\cdot {N_u}^2 - 2\cdot B\cdot C\cdot D - 2\cdot A\cdot C\cdot N_u + 2\cdot B\cdot C\cdot N_u\right)} = 0$$

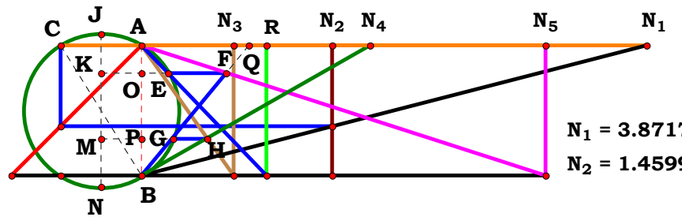
4RST3AB1R3

Unit.

$AB := 1$

Given.

$N_1 := 3.87172$ $N_2 := 1.45996$ $N_3 := .70920$ $N_4 := 1.75290$ $N_5 := 3.09945$



$N_1 = 3.87172$
$N_2 = 1.45996$
$N_3 = 0.70920$
$N_4 = 1.75290$
$N_5 = 3.09945$
$R = 0.95741$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $BP := \frac{AB \cdot N_3}{N_3 + N_4}$

$JN := \sqrt{AB^2 + AC^2}$ $JM := JN - \left(BP + \frac{JN - AB}{2}\right)$

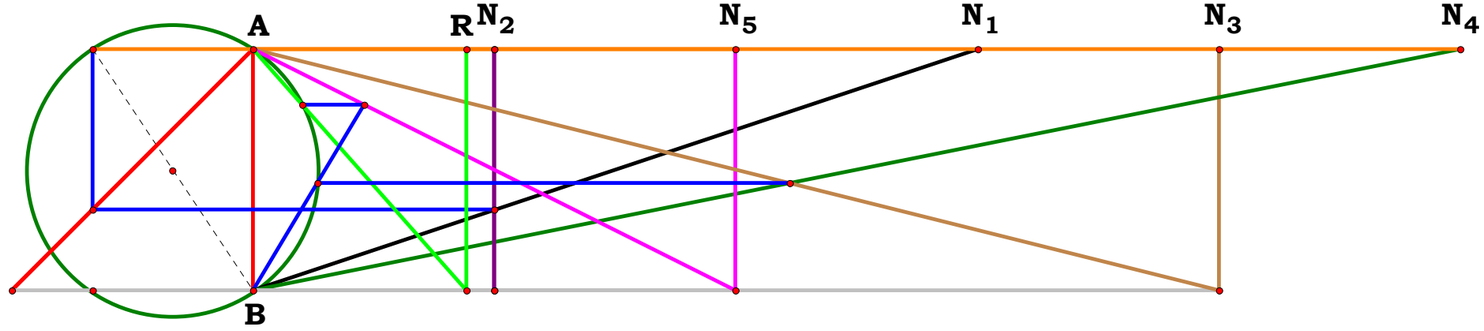
$GM := \sqrt{JM \cdot (JN - JM)}$ $PG := GM - \frac{AC}{2}$

$AQ := \frac{PG \cdot AB}{BP}$ $AO := \frac{AB \cdot AQ}{AQ + N_5}$

$JK := AO + \frac{JN - AB}{2}$ $EK := \sqrt{JK \cdot (JN - JK)}$

$EO := EK - \frac{AC}{2}$ $R := \frac{EO \cdot AB}{AO}$

$R = 0.957407$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 2.00000$
$R = 0.88542$

$AB = 1.00000$
$AC = 0.66667$
$BP = 0.44444$
$JN = 1.20185$
$JM = 0.65648$
$GM = 0.59835$

$PG = 0.26502$
$AQ = 0.59629$
$AO = 0.22967$
$JK = 0.33060$
$EK = 0.53669$
$EO = 0.20335$

$R - \frac{EO \cdot AB}{AO} = 0.00000$

4RST3AB1R4

Unit.

$AB := 1$

Given.

$N_1 := 5.29553$

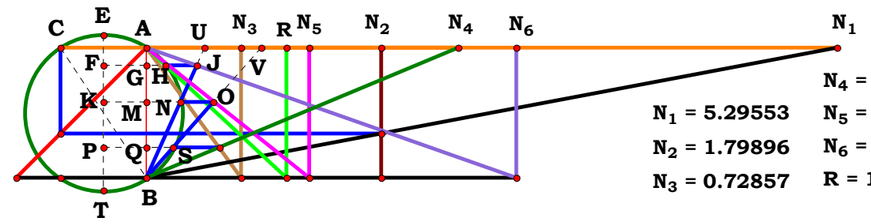
$N_2 := 1.79896$

$N_3 := .72857$

$N_4 := 2.39216$

$N_5 := 1.24947$

$N_6 := 2.83793$



N_1 = 5.29553 N_4 = 2.39216

N_2 = 1.79896 N_5 = 1.24947

N_3 = 0.72857 N_6 = 2.83793

R = 1.07055

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad BQ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ET := \sqrt{AB^2 + AC^2} \qquad EP := ET - \left(BQ + \frac{ET - AB}{2}\right)$$

$$PS := \sqrt{EP \cdot (ET - EP)} \qquad QS := PS - \frac{AC}{2}$$

$$AV := \frac{QS \cdot AB}{BQ} \qquad BM := \frac{AB \cdot N_5}{AV + N_5}$$

$$KT := BM + \frac{ET - AB}{2}$$

$$KN := \sqrt{KT \cdot (ET - KT)}$$

$$MN := KN - \frac{AC}{2}$$

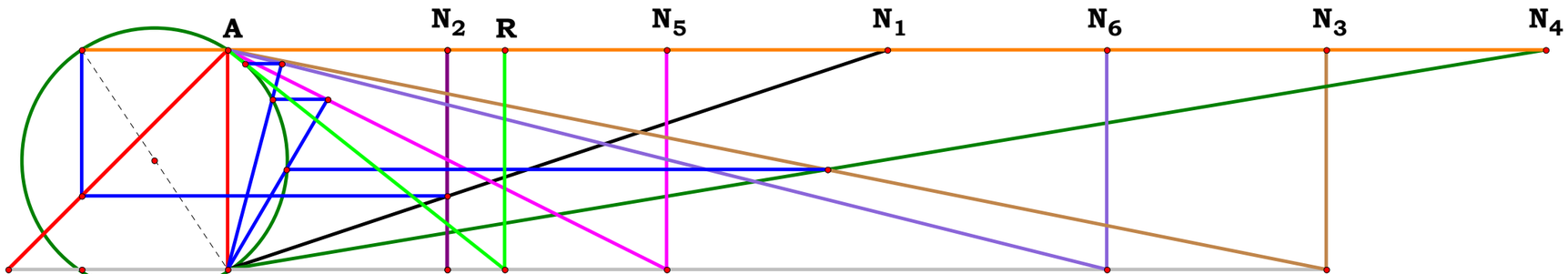
$$AU := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{AB \cdot N_6}{AU + N_6} \qquad AG := AB - BG$$

$$EF := AG + \frac{ET - AB}{2} \qquad FH := \sqrt{EF \cdot (ET - EF)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{AG}$$

$R = 1.070553$



N_1 = 3.00000 AB = 1.00000 AV = 0.58491 AG = 0.06117

N_2 = 1.00000 AC = 0.66667 BM = 0.77372 EF = 0.16209

N_3 = 5.00000 BQ = 0.45455 KT = 0.87465 FH = 0.41053

N_4 = 6.00000 ET = 1.20185 KN = 0.53497 GH = 0.07720

N_5 = 2.00000 EP = 0.64638 MN = 0.20163 $R - \frac{GH \cdot AB}{AG}$ = 0.00000

N_6 = 4.00000 PS = 0.59920 AU = 0.26060

R = 1.26211 QS = 0.26587 BG = 0.93883

Definitions.

4RST3AB1R5

Unit.

$AB := 1$

Given.

$N_1 := 3.59083$

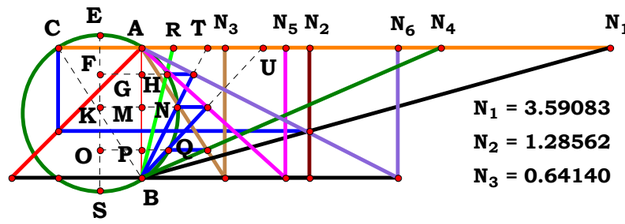
$N_2 := 1.28562$

$N_3 := .64140$

$N_4 := 2.29530$

$N_5 := 1.10418$

$N_6 := 1.96621$



$N_1 = 3.59083$
$N_2 = 1.28562$
$N_3 = 0.64140$
$N_4 = 2.29530$
$N_5 = 1.10418$
$N_6 = 1.96621$
$R = 0.24242$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ES := \sqrt{AB^2 + AC^2} \qquad OS := BP + \frac{ES - AB}{2}$$

$$OQ := \sqrt{OS \cdot (ES - OS)} \qquad PQ := OQ - \frac{AC}{2}$$

$$AU := \frac{PQ \cdot AB}{BP}$$

$$BM := \frac{AB \cdot N_5}{N_5 + AU}$$

$$KS := BM + \frac{ES - AB}{2}$$

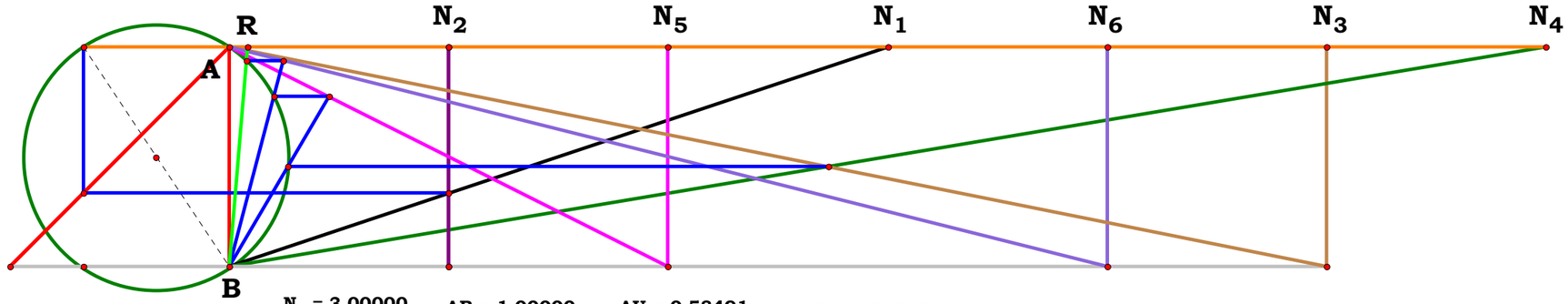
$$KN := \sqrt{KS \cdot (ES - KS)}$$

$$MN := KN - \frac{AC}{2} \qquad AT := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{N_6 \cdot AB}{N_6 + AT} \qquad FS := BG + \frac{ES - AB}{2}$$

$$FH := \sqrt{FS \cdot (ES - FS)} \qquad GH := FH - \frac{AC}{2}$$

$$R := \frac{GH \cdot AB}{BG} \qquad R = 0.242424$$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 5.00000$
$N_4 = 6.00000$
$N_5 = 2.00000$
$N_6 = 4.00000$
$R = 0.08223$

$AB = 1.00000$
$AC = 0.66667$
$BP = 0.45455$
$ES = 1.20185$
$OS = 0.55547$
$OQ = 0.59920$
$PQ = 0.26587$

$AU = 0.58491$
$BM = 0.77372$
$KS = 0.87465$
$KN = 0.53497$
$MN = 0.20163$
$AT = 0.26060$
$BG = 0.93883$

$FS = 1.03976$
$FH = 0.41053$
$GH = 0.07720$
$R - \frac{GH \cdot AB}{BG} = 0.00000$

Definitions.

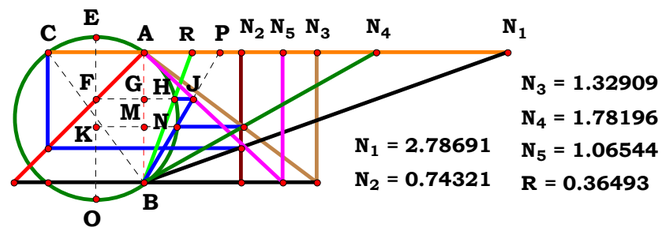
4RST3AB1R6

Unit.

$AB := 1$

Given.

$N_1 := 2.78691$ $N_2 := .74321$ $N_3 := 1.32909$ $N_4 := 1.78196$ $N_5 := 1.06544$



$N_1 = 2.78691$
$N_2 = 0.74321$
$N_3 = 1.32909$
$N_4 = 1.78196$
$N_5 = 1.06544$
$R = 0.36493$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad BM := \frac{N_3 \cdot AB}{N_3 + N_4}$$

$$EO := \sqrt{AB^2 + AC^2} \qquad KO := BM + \frac{EO - AB}{2}$$

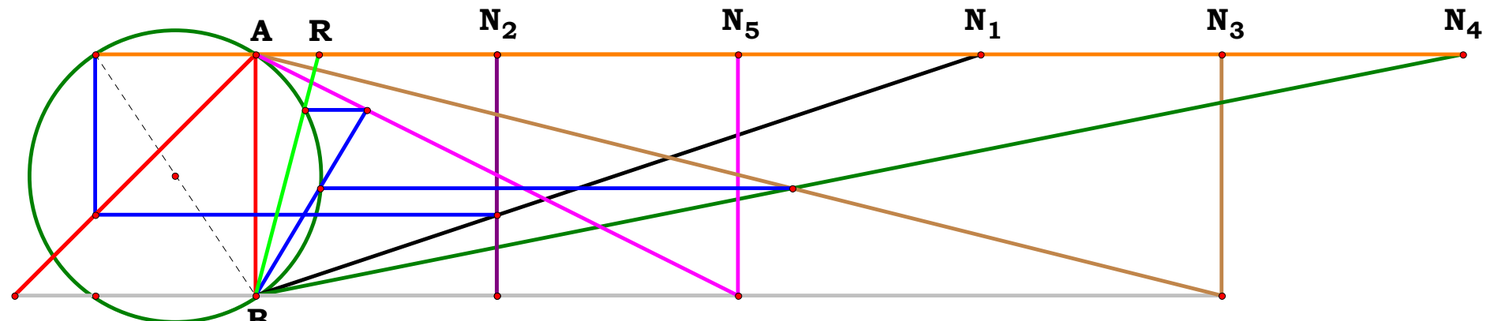
$$KN := \sqrt{KO \cdot (EO - KO)} \qquad MN := KN - \frac{AC}{2}$$

$$AP := \frac{MN \cdot AB}{BM} \qquad BG := \frac{N_5 \cdot AB}{AP + N_5}$$

$$FO := BG + \frac{EO - AB}{2} \qquad FH := \sqrt{FO \cdot (EO - FO)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{BG}$$

$R = 0.364931$



$N_1 = 3.00000$
$N_2 = 1.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 2.00000$
$R = 0.26398$

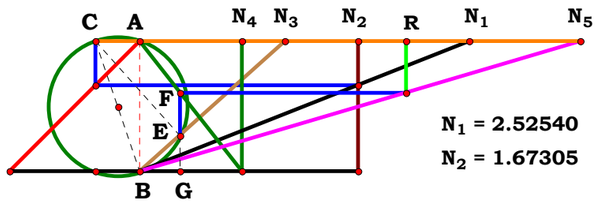
$AB = 1.00000$
$AC = 0.66667$
$BM = 0.44444$
$EO = 1.20185$
$KO = 0.54537$
$KN = 0.59835$

$MN = 0.26502$
$AP = 0.59629$
$BG = 0.77033$
$FO = 0.87125$
$FH = 0.53669$
$GH = 0.20335$

$R - \frac{GH \cdot AB}{BG} = 0.00000$

Definitions.

4RST3B1R7



$N_3 = 1.11600$
$N_4 = 0.78432$
$N_5 = 3.38034$
$R = 2.04513$

$N_1 = 2.52540$
$N_2 = 1.67305$

Unit. $AB := 1$ Given. $N_1 := 2.52540$ $N_2 := 1.67305$ $N_3 := 1.11600$

$N_4 := .78432$ $N_5 := 3.38034$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot {N_u}^3 + {N_u}^2 \cdot D \cdot (B - A) + N_u \cdot B \cdot C \cdot (C - D)}{B \cdot E \cdot \left(C^2 + {N_u}^2\right)} = 2.045128$$

$$Num := \frac{B \cdot {N_u}^3 + {N_u}^2 \cdot D \cdot (B - A) + N_u \cdot B \cdot C \cdot (C - D)}{\sqrt{\left[B \cdot {N_u}^3 + {N_u}^2 \cdot D \cdot (B - A) + N_u \cdot B \cdot C \cdot (C - D)\right]^2}}$$

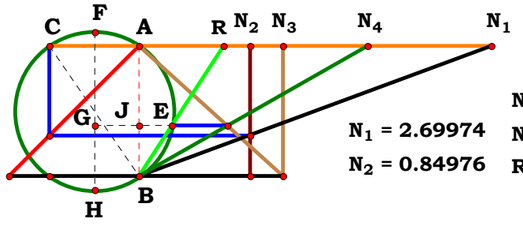
$$Den := \frac{B \cdot E \cdot \left(C^2 + {N_u}^2\right)}{\sqrt{\left[B \cdot E \cdot \left(C^2 + {N_u}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2 \cdot E^2 \cdot \left(C^2 + {N_u}^2\right)^2} \cdot \left[B \cdot {N_u}^3 - D \cdot (A - B) \cdot {N_u}^2 + B \cdot C \cdot (C - D) \cdot N_u\right]}{B \cdot E \cdot \sqrt{\left[B \cdot {N_u}^3 - D \cdot (A - B) \cdot {N_u}^2 + B \cdot C \cdot (C - D) \cdot N_u\right]^2} \cdot \left(C^2 + {N_u}^2\right)} = 0$$

4RST3B1R8



Unit. $AB := 1$ Given. $N_1 := 2.69974$ $N_2 := .84979$ $N_3 := 1.10631$

$N_4 := 1.75290$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{(C+D)\cdot(A-B)+\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}}{2\cdot B\cdot D}=0.653525$$

$$Num := \frac{(C+D)\cdot(A-B)+\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}}{\sqrt{\left[(C+D)\cdot(A-B)+\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}\right]^2}}$$

$$Den := \frac{2\cdot B\cdot D}{\sqrt{(2\cdot B\cdot D)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[(C+D)\cdot(A-B)+\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}\right]\cdot\sqrt{B^2\cdot D^2}}{B\cdot D\cdot\sqrt{\left[(C+D)\cdot(A-B)+\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}\right]^2}}=0$$

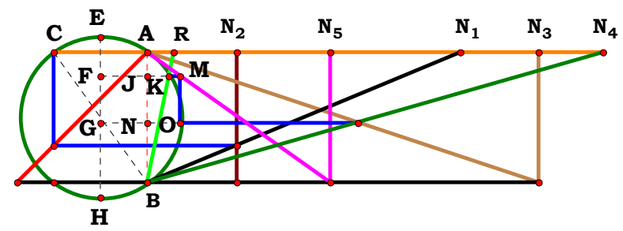
4RST3AB1R9

Unit.

$AB := 1$

Given.

$N_1 := 2.39948$ $N_2 := .68510$ $N_3 := 3.00473$ $N_4 := 3.49634$ $N_5 := 1.40444$



$N_1 = 2.39948$
$N_2 = 0.68510$
$N_3 = 3.00473$
$N_4 = 3.49634$
$N_5 = 1.40444$
$R = 0.20645$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad EH := \sqrt{AB^2 + AC^2}$$

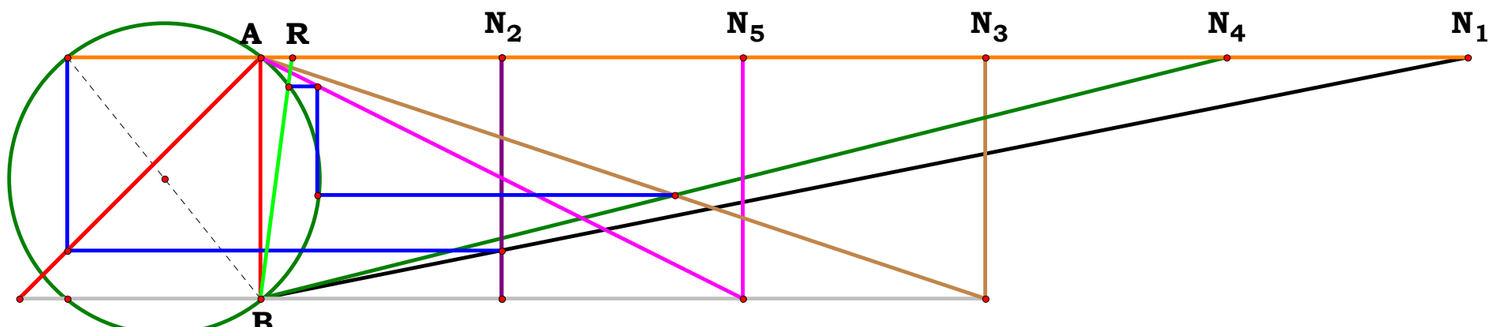
$$BN := \frac{AB \cdot N_3}{N_3 + N_4} \qquad GH := BN + \frac{EH - AB}{2}$$

$$GO := \sqrt{GH \cdot (EH - GH)} \qquad NO := GO - \frac{AC}{2}$$

$$BK := \frac{AB \cdot (N_5 - NO)}{N_5} \qquad FH := BK + \frac{EH - AB}{2}$$

$$FK := \sqrt{FH \cdot (EH - FH)} \qquad JK := FK - \frac{AC}{2}$$

$$R := \frac{JK \cdot AB}{BK} \qquad R = 0.206449$$



$N_1 = 5.00000$ $AB = 1.00000$ $NO = 0.23632$ $JK \cdot AB = 0.11400$

$N_2 = 1.00000$ $AC = 0.80000$ $BK = 0.88184$ $R - \frac{JK \cdot AB}{BK} = 0.00000$

$N_3 = 3.00000$ $EH = 1.28062$ $FH = 1.02215$

$N_4 = 4.00000$ $BN = 0.42857$ $FK = 0.51400$

$N_5 = 2.00000$ $GH = 0.56888$ $JK = 0.11400$

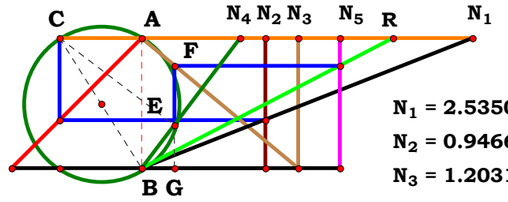
$R = 0.12928$ $GO = 0.63632$

Definitions.

$$R - \frac{N_5 \cdot \sqrt{(N_3 + N_4)^2} \cdot \left[\sqrt{(N_3 + N_4) \cdot \left[2 \cdot \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4} \cdot \sqrt{(N_3 + N_4)^2} \cdot (AC + N_5) + 4 \cdot N_3{}^2 \ \ldots \right.} \right.}{\left. + (N_3 + N_4) \cdot \left[(N_3 + N_4) \cdot \left[AC^2 \cdot (N_5{}^2 - 2) - 2 \cdot AC \cdot N_5 \right] - 4 \cdot N_3 \right] \right]} = 0$$

$$\frac{\left. - AC \cdot \sqrt{N_5{}^2 \cdot (N_3 + N_4)^3} \right]}{\sqrt{N_5{}^2 \cdot (N_3 + N_4)^3} \cdot \left[AC \cdot \sqrt{(N_3 + N_4)^2} - \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4} + 2 \cdot N_5 \cdot \sqrt{(N_3 + N_4)^2} \right]}$$

4RST3B1R10



$N_1 = 2.53508$ $N_4 = 0.75526$

$N_2 = 0.94661$ $N_5 = 1.52067$

$N_3 = 1.20317$ $R = 1.92625$

Unit. $AB := 1$ Given. $N_1 := 2.53508$ $N_2 := .94661$ $N_3 := 1.20317$

$N_4 := .75526$ $N_5 := 1.52067$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{E \cdot \left[B \cdot \left(D^2 - C \cdot D + N_u{}^2\right) - C \cdot N_u \cdot (A - B)\right]} = 1.926251$$

$$Num := \frac{B \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot N_u \cdot \left(D^2 + N_u{}^2\right)\right]^2}}$$

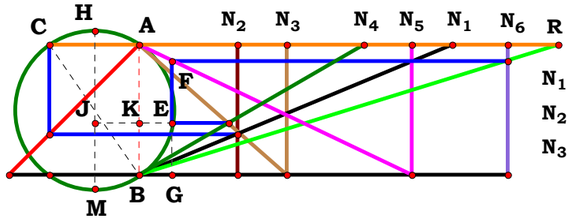
$$Den := \frac{E \cdot \left[B \cdot \left(D^2 - C \cdot D + N_u{}^2\right) - C \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[E \cdot \left[B \cdot \left(D^2 - C \cdot D + N_u{}^2\right) - C \cdot N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \left(D^2 + N_u{}^2\right) \cdot \sqrt{E^2 \cdot \left[B \cdot \left(D^2 - C \cdot D + N_u{}^2\right) - C \cdot N_u \cdot (A - B)\right]^2}}{E \cdot \left[B \cdot \left(D^2 - C \cdot D + N_u{}^2\right) - C \cdot N_u \cdot (A - B)\right] \cdot \sqrt{B^2 \cdot N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2}} = 0$$

4RST3B1R11



$N_1 = 2.39948$ $N_4 = 1.72384$

$N_2 = 0.75290$ $N_5 = 2.09213$

$N_3 = 1.13537$ $N_6 = 2.82825$

$R = 3.21994$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := .75290$ $N_3 := 1.13537$

$N_4 := 1.72384$ $N_5 := 2.09213$ $N_6 := 2.82825$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2\cdot B\cdot N_u^{\,2}\cdot (C+D)}{F\cdot\left[(C+D)\cdot\left[E\cdot(B-A)+2\cdot B\cdot N_u\right]-E\cdot\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}\right]} = 3.219938$$

$$Num := \frac{2\cdot B\cdot N_u^{\,2}\cdot (C+D)}{\sqrt{\left[2\cdot B\cdot N_u^{\,2}\cdot (C+D)\right]^2}}$$

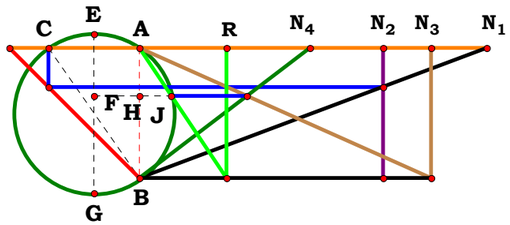
$$Den := \frac{F\cdot\left[(C+D)\cdot\left[E\cdot(B-A)+2\cdot B\cdot N_u\right]-E\cdot\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}\right]}{\sqrt{\left[F\cdot\left[(C+D)\cdot\left[E\cdot(B-A)+2\cdot B\cdot N_u\right]-E\cdot\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B\cdot N_u^{\,2}\cdot (C+D)\cdot\sqrt{F^2\cdot\left[(C+D)\cdot\left[E\cdot(B-A)+2\cdot B\cdot N_u\right]-E\cdot\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}\right]^2}}{F\cdot\left[(C+D)\cdot\left[E\cdot(B-A)+2\cdot B\cdot N_u\right]-E\cdot\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}\right]\cdot\sqrt{B^2\cdot N_u^{\,4}\cdot (C+D)^2}} = 0$$

4RST3B2R1



$N_1 = 2.66100$
$N_2 = 1.86676$
$N_3 = 2.23955$
$N_4 = 1.30735$
$R = 0.66659$

Unit. $AB := 1$ **Given.** $N_1 := 2.66100$ $N_2 := 1.86676$ $N_3 := 2.23955$

$N_4 := 1.30735$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}-A\cdot(C+D)}{2\cdot B\cdot C}=0.666591$$

$$Num := \frac{\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}-A\cdot(C+D)}{\sqrt{\left[\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}-A\cdot(C+D)\right]^2}}$$

$$Den := \frac{2\cdot B\cdot C}{\sqrt{(2\cdot B\cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}-A\cdot(C+D)\right]\cdot\sqrt{B^2\cdot C^2}}{B\cdot C\cdot\sqrt{\left[\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}-A\cdot(C+D)\right]^2}}=0$$

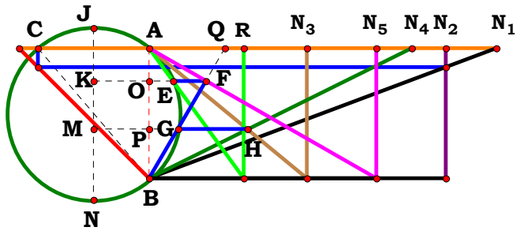
4RST3AB2R3

Given.

$AB := 1$

Unit.

$N_1 := 2.66100$ $N_2 := 1.50839$ $N_3 := 1.212839$ $N_4 := 2.01441$ $N_5 := 1.74751$



$N_1 = 2.66100$
$N_2 = 2.27357$
$N_3 = 1.21286$
$N_4 = 2.01441$
$N_5 = 1.74751$
$R = 0.72462$

Descriptions.

$AC := \frac{N_2}{N_1}$ $BP := \frac{AB \cdot N_3}{N_3 + N_4}$

$JN := \sqrt{AB^2 + AC^2}$ $JM := JN - \left(BP + \frac{JN - AB}{2}\right)$

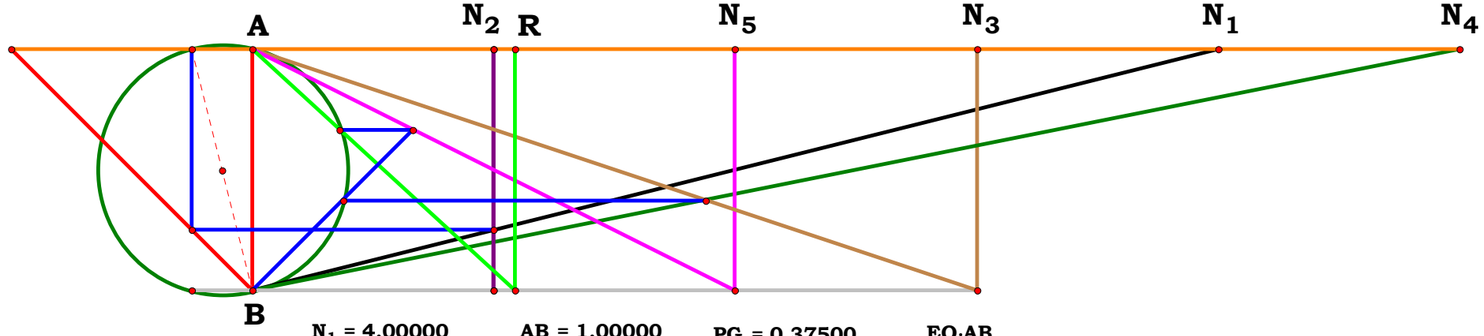
$GM := \sqrt{JM \cdot (JN - JM)}$ $PG := GM - \frac{AC}{2}$

$AQ := \frac{PG \cdot AB}{BP}$ $AO := \frac{AB \cdot AQ}{AQ + N_5}$

$JK := AO + \frac{JN - AB}{2}$ $EK := \sqrt{JK \cdot (JN - JK)}$

$EO := EK - \frac{AC}{2}$ $R := \frac{EO \cdot AB}{AO}$

$R = 0.855795$



$N_1 = 4.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 5.00000$
$N_5 = 2.00000$
$R = 1.08809$

$AB = 1.00000$
$AC = 0.25000$
$BP = 0.37500$
$JN = 1.03078$
$JM = 0.64039$
$GM = 0.50000$

$PG = 0.37500$
$AQ = 1.00000$
$AO = 0.33333$
$JK = 0.34872$
$EK = 0.48770$
$EO = 0.36270$

$R - \frac{EO \cdot AB}{AO} = 0.00000$

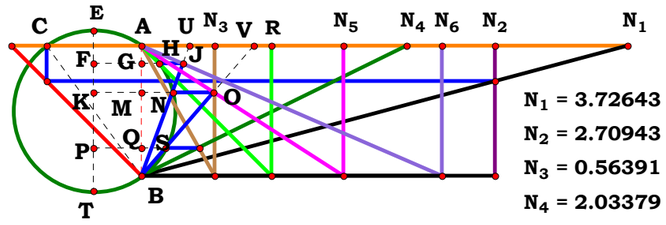
4RST3AB2R4

Unit.

$AB := 1$

Given.

$N_1 := 3.72643$ $N_2 := 2.70943$ $N_3 := .56391$ $N_4 := 2.03379$ $N_5 := 1.55380$ $N_6 := 2.30522$



$N_1 = 3.72643$ $N_5 = 1.55380$
$N_2 = 2.70943$ $N_6 = 2.30522$
$N_3 = 0.56391$ $R = 0.99720$
$N_4 = 2.03379$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad BQ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ET := \sqrt{AB^2 + AC^2} \qquad EP := ET - \left(BQ + \frac{ET - AB}{2}\right)$$

$$PS := \sqrt{EP \cdot (ET - EP)} \qquad QS := PS - \frac{AC}{2}$$

$$AV := \frac{QS \cdot AB}{BQ} \qquad BM := \frac{AB \cdot N_5}{AV + N_5}$$

$$KT := BM + \frac{ET - AB}{2} \qquad KN := \sqrt{KT \cdot (ET - KT)}$$

$$MN := KN - \frac{AC}{2} \qquad AU := \frac{MN \cdot AB}{BM}$$

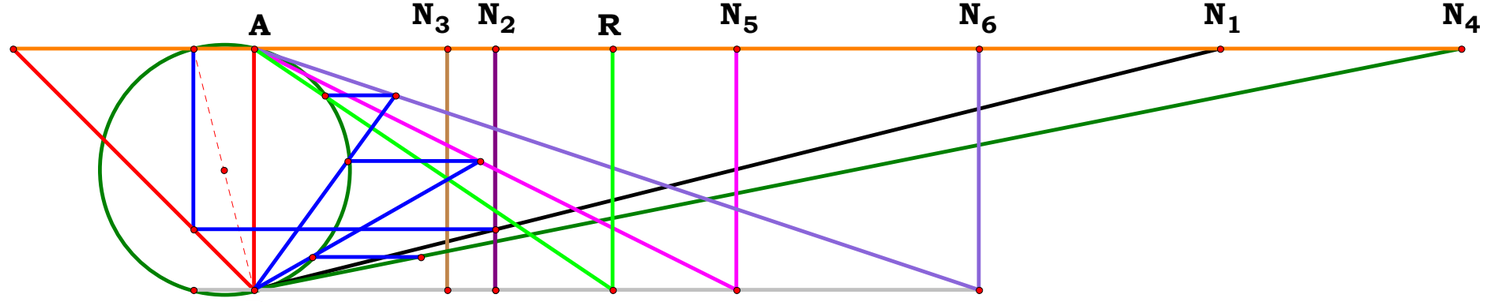
$$BG := \frac{AB \cdot N_6}{AU + N_6} \qquad AG := AB - BG$$

$$EF := AG + \frac{ET - AB}{2} \qquad FH := \sqrt{EF \cdot (ET - EF)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{AG}$$

$R = 0.997203$

Definitions.



$N_1 = 4.00000$ $AB = 1.00000$ $AV = 1.75294$ $AG = 0.19583$
$N_2 = 1.00000$ $AC = 0.25000$ $BM = 0.53292$ $EF = 0.21122$
$N_3 = 0.80000$ $BQ = 0.13793$ $KT = 0.54830$ $FH = 0.41606$
$N_4 = 5.00000$ $ET = 1.03078$ $KN = 0.51434$ $GH = 0.29106$
$N_5 = 2.00000$ $EP = 0.87746$ $MN = 0.38934$ $R - \frac{GH \cdot AB}{AG} = 0.00000$
$N_6 = 3.00000$ $PS = 0.36678$ $AU = 0.73058$
$R = 1.48627$ $QS = 0.24178$ $BG = 0.80417$

4RST3AB2R5

Unit.

$AB := 1$

Given.

$N_1 := 2.59320$

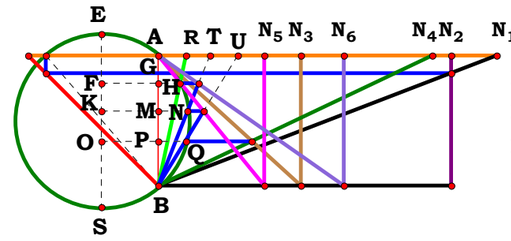
$N_2 := 2.24451$

$N_3 := 1.09663$

$N_4 := 2.10159$

$N_5 := .81768$

$N_6 := 1.42381$



$N_1 = 2.59320$ $N_5 = 0.81768$

$N_2 = 2.24451$ $N_6 = 1.42381$

$N_3 = 1.09663$ $R = 0.20977$

$N_4 = 2.10159$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ES := \sqrt{AB^2 + AC^2} \qquad OS := BP + \frac{ES - AB}{2}$$

$$OQ := \sqrt{OS \cdot (ES - OS)} \qquad PQ := OQ - \frac{AC}{2}$$

$$AU := \frac{PQ \cdot AB}{BP} \qquad BM := \frac{AB \cdot N_5}{N_5 + AU}$$

$$KS := BM + \frac{ES - AB}{2} \qquad KN := \sqrt{KS \cdot (ES - KS)}$$

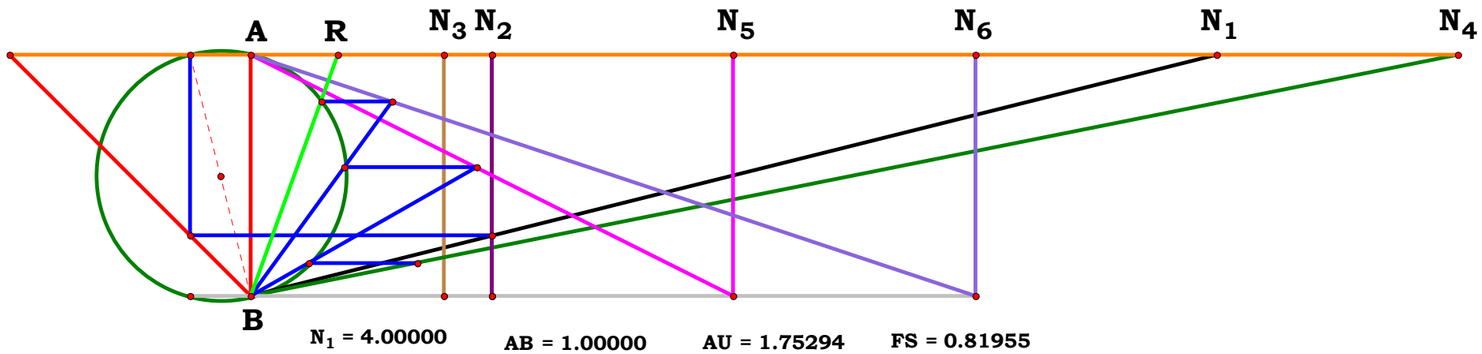
$$MN := KN - \frac{AC}{2} \qquad AT := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{N_6 \cdot AB}{N_6 + AT} \qquad FS := BG + \frac{ES - AB}{2}$$

$$FH := \sqrt{FS \cdot (ES - FS)} \qquad GH := FH - \frac{AC}{2}$$

$$R := \frac{GH \cdot AB}{BG} \qquad R = 0.209765$$

Definitions.



$N_1 = 4.00000$ $AB = 1.00000$ $AU = 1.75294$ $FS = 0.81955$

$N_2 = 1.00000$ $AC = 0.25000$ $BM = 0.53292$ $FH = 0.41606$

$N_3 = 0.80000$ $BP = 0.13793$ $KS = 0.54830$ $GH = 0.29106$

$N_4 = 5.00000$ $ES = 1.03078$ $KN = 0.51434$ $R - \frac{GH \cdot AB}{BG} = 0.00000$

$N_5 = 2.00000$ $OS = 0.15332$ $MN = 0.38934$

$N_6 = 3.00000$ $OQ = 0.36678$ $AT = 0.73058$

$R = 0.36194$ $PQ = 0.24178$ $BG = 0.80417$

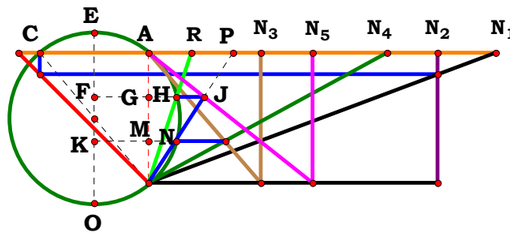
4RST3AB2R6

Unit.

$AB := 1$

Given.

$N_1 := 2.66100$ $N_2 := 2.21545$ $N_3 := .86417$ $N_4 := 1.83038$ $N_5 := 1.26322$



$N_1 = 2.66100$
$N_2 = 2.21545$
$N_3 = 0.86417$
$N_4 = 1.83038$
$N_5 = 1.26322$
$R = 0.32517$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad BM := \frac{N_3 \cdot AB}{N_3 + N_4}$$

$$EO := \sqrt{AB^2 + AC^2} \qquad KO := BM + \frac{EO - AB}{2}$$

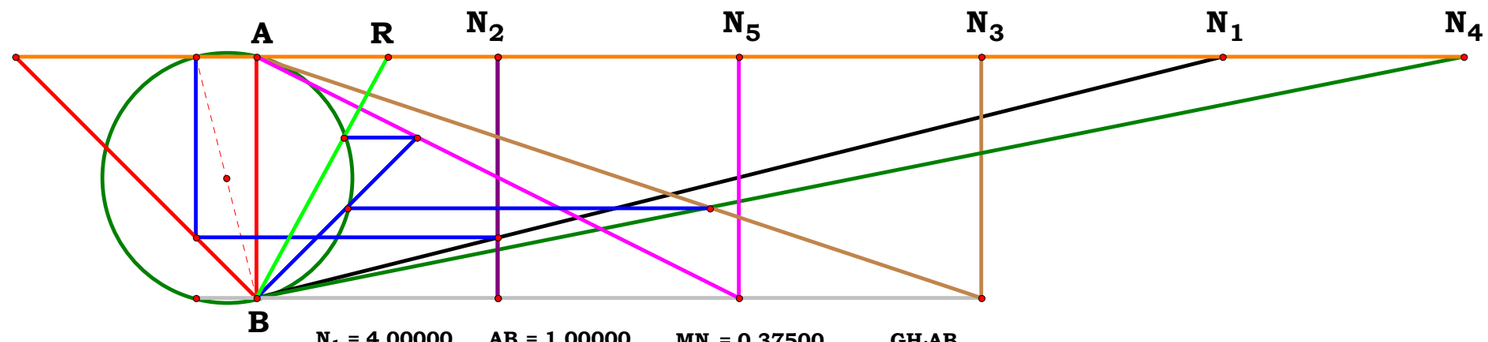
$$KN := \sqrt{KO \cdot (EO - KO)} \qquad MN := KN - \frac{AC}{2}$$

$$AP := \frac{MN \cdot AB}{BM} \qquad BG := \frac{N_5 \cdot AB}{AP + N_5}$$

$$FO := BG + \frac{EO - AB}{2} \qquad FH := \sqrt{FO \cdot (EO - FO)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{BG}$$

$R = 0.325173$



$N_1 = 4.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 5.00000$
$N_5 = 2.00000$
$R = 0.54404$

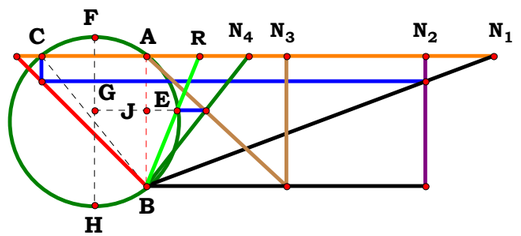
$AB = 1.00000$
$AC = 0.25000$
$BM = 0.37500$
$EO = 1.03078$
$KO = 0.39039$
$KN = 0.50000$

$MN = 0.37500$
$AP = 1.00000$
$BG = 0.66667$
$FO = 0.68205$
$FH = 0.48770$
$GH = 0.36270$

$$R - \frac{GH \cdot AB}{BG} = 0.00000$$

Definitions.

4RST3B2R8



$N_1 = 2.66100$
$N_2 = 2.13797$
$N_3 = 1.07726$
$N_4 = 0.78432$
$R = 0.40579$

Unit. $AB := 1$ Given. $N_1 := 2.66100$ $N_2 := 2.13797$ $N_3 := 1.07726$

$N_4 := .78432$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}-A\cdot(C+D)}{2\cdot B\cdot D}=0.40579$$

$$Num := \frac{\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}-A\cdot(C+D)}{\sqrt{\left[\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}-A\cdot(C+D)\right]^2}}$$

$$Den := \frac{2\cdot B\cdot D}{\sqrt{(2\cdot B\cdot D)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}-A\cdot(C+D)\right]\cdot\sqrt{B^2\cdot D^2}}{B\cdot D\cdot\sqrt{\left[\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}-A\cdot(C+D)\right]^2}}=0$$

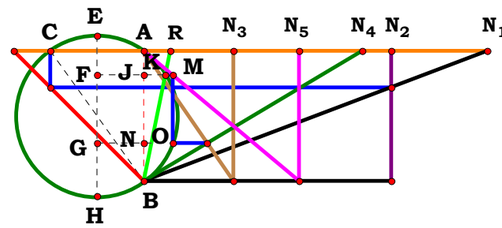
4RST3AB2R9

Unit.

$AB := 1$

Given.

$N_1 := 2.63194$ $N_2 := 1.89582$ $N_3 := .68983$ $N_4 := 1.67541$ $N_5 := 1.19542$



$N_1 = 2.63194$
$N_2 = 1.89582$
$N_3 = 0.68983$
$N_4 = 1.67541$
$N_5 = 1.19542$
$R = 0.20677$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad EH := \sqrt{AB^2 + AC^2}$$

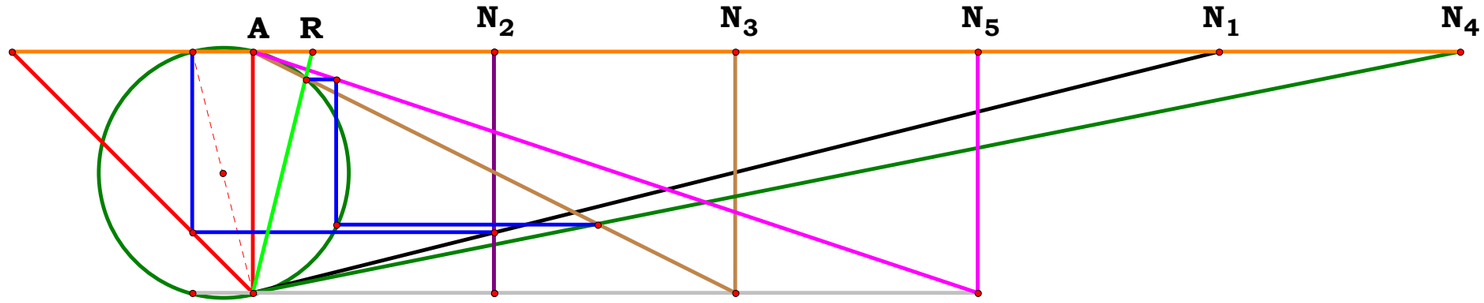
$$BN := \frac{AB \cdot N_3}{N_3 + N_4} \qquad GH := BN + \frac{EH - AB}{2}$$

$$GO := \sqrt{GH \cdot (EH - GH)} \qquad NO := GO - \frac{AC}{2}$$

$$BK := \frac{AB \cdot (N_5 - NO)}{N_5} \qquad FH := BK + \frac{EH - AB}{2}$$

$$FK := \sqrt{FH \cdot (EH - FH)} \qquad JK := FK - \frac{AC}{2}$$

$$R := \frac{JK \cdot AB}{BK} \qquad R = 0.206773$$



B

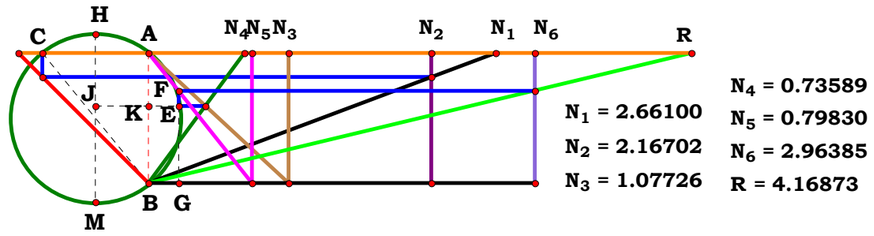
$N_1 = 4.00000$
$N_2 = 1.00000$
$N_3 = 2.00000$
$N_4 = 5.00000$
$N_5 = 3.00000$
$R = 0.24526$

$AB = 1.00000$
$AC = 0.25000$
$EH = 1.03078$
$BN = 0.28571$
$GH = 0.30110$
$GO = 0.46873$

$NO = 0.34373$
$BK = 0.88542$
$FH = 0.90081$
$FK = 0.34216$
$JK = 0.21716$

$$R - \frac{JK \cdot AB}{BK} = 0.00000$$

4RST3B2R11



Unit. $AB := 1$ Given. $N_1 := 2.66100$ $N_2 := 2.16702$ $N_3 := 1.07726$

$N_4 := .73589$ $N_5 := .79830$ $N_6 := 2.96385$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2\cdot B\cdot {N_u}^2\cdot (C+D)}{F\cdot\left[(C+D)\cdot\left(A\cdot E+2\cdot B\cdot N_u\right)-E\cdot\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}\right]}=4.168744$$

$$Num := \frac{2\cdot B\cdot {N_u}^2\cdot (C+D)}{\sqrt{\left[2\cdot B\cdot {N_u}^2\cdot (C+D)\right]^2}}$$

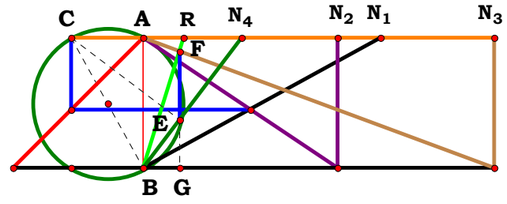
$$Den := \frac{F\cdot\left[(C+D)\cdot\left(A\cdot E+2\cdot B\cdot N_u\right)-E\cdot\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}\right]}{\sqrt{\left[F\cdot\left[(C+D)\cdot\left(A\cdot E+2\cdot B\cdot N_u\right)-E\cdot\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{B\cdot {N_u}^2\cdot\sqrt{F^2\cdot\left[(C+D)\cdot\left(A\cdot E+2\cdot B\cdot N_u\right)-E\cdot\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}\right]^2}\cdot (C+D)}{F\cdot\left[(C+D)\cdot\left(A\cdot E+2\cdot B\cdot N_u\right)-E\cdot\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(A^2+2\cdot B^2\right)}\right]\cdot\sqrt{B^2\cdot {N_u}^4\cdot (C+D)^2}}=0$$

4RST3B3R0



$N_1 = 1.81833$
$N_2 = 1.48902$
$N_3 = 2.69478$
$N_4 = 0.75526$
$R = 0.31400$

Unit. $AB := 1$ Given. $N_1 := 1.81833$ $N_2 := 1.48902$ $N_3 := 2.69478$

$N_4 := .75526$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left[D \cdot (A+B) - B \cdot N_u\right]}{D^2 \cdot (A+B) + {N_u}^2 \cdot (A+B) - C \cdot D \cdot (A+B) + B \cdot C \cdot N_u} = 0.314003$$

$$Num := \frac{N_u \cdot \left[D \cdot (A+B) - B \cdot N_u\right]}{\sqrt{\left[N_u \cdot \left[D \cdot (A+B) - B \cdot N_u\right]\right]^2}}$$

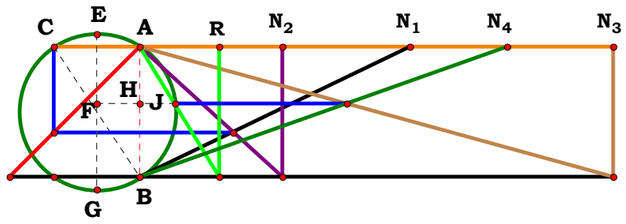
$$Den := \frac{D^2 \cdot (A+B) + {N_u}^2 \cdot (A+B) - C \cdot D \cdot (A+B) + B \cdot C \cdot N_u}{\sqrt{\left[D^2 \cdot (A+B) + {N_u}^2 \cdot (A+B) - C \cdot D \cdot (A+B) + B \cdot C \cdot N_u\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[D \cdot (A+B) - B \cdot N_u\right] \cdot \sqrt{\left[(A+B) \cdot D^2 - C \cdot (A+B) \cdot D + (A+B) \cdot {N_u}^2 + B \cdot C \cdot N_u\right]^2}}{\sqrt{{N_u}^2 \cdot \left[D \cdot (A+B) - B \cdot N_u\right]^2} \cdot \left[(A+B) \cdot D^2 - C \cdot (A+B) \cdot D + (A+B) \cdot {N_u}^2 + B \cdot C \cdot N_u\right]} = 0$$

4RST3B3R1



$N_1 = 2.07016$
$N_2 = 1.09190$
$N_3 = 3.63430$
$N_4 = 2.81833$
$R = 0.61113$

Unit. $AB := 1$ Given. $N_1 := 2.07016$ $N_2 := 1.09190$ $N_3 := 3.63430$

$N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

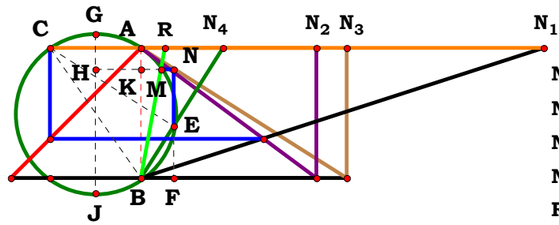
$$\frac{\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C+D)}{2\cdot C\cdot(A+B)} = 0.611133$$

$$Num := \frac{\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C+D)}{\sqrt{\left[\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C+D)\right]^2}}$$

$$Den := \frac{2\cdot C\cdot(A+B)}{\sqrt{[2\cdot C\cdot(A+B)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{C^2\cdot(A+B)^2}\cdot\left[\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C+D)\right]}{C\cdot(A+B)\cdot\sqrt{\left[\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C+D)\right]^2}} = 0$$



$N_1 = 3.08717$
$N_2 = 1.34373$
$N_3 = 1.58092$
$N_4 = 0.62935$
$R = 0.18745$

Unit. $AB := 1$ **Given.** $N_1 := 3.08717$ $N_2 := 1.34373$ $N_3 := 1.58092$ $N_4 := .62935$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B\cdot\left(D^2+N_u{}^2\right)-\sqrt{B^2\cdot\left(D^2+N_u{}^2\right)^2+4\cdot C\cdot\left[(A+B)\cdot\left(D^2-C\cdot D+N_u{}^2\right)+B\cdot C\cdot N_u\right]\cdot\left[D\cdot(A+B)-B\cdot N_u\right]}}{2\cdot\left[D\cdot(C-D)\cdot(A+B)-N_u\cdot\left[B\cdot C+N_u\cdot(A+B)\right]\right]} = 0.187449$$

$$Num := \frac{B\cdot\left(D^2+N_u{}^2\right)-\sqrt{B^2\cdot\left(D^2+N_u{}^2\right)^2+4\cdot C\cdot\left[(A+B)\cdot\left(D^2-C\cdot D+N_u{}^2\right)+B\cdot C\cdot N_u\right]\cdot\left[D\cdot(A+B)-B\cdot N_u\right]}}{\sqrt{\left[B\cdot\left(D^2+N_u{}^2\right)-\sqrt{B^2\cdot\left(D^2+N_u{}^2\right)^2+4\cdot C\cdot\left[(A+B)\cdot\left(D^2-C\cdot D+N_u{}^2\right)+B\cdot C\cdot N_u\right]\cdot\left[D\cdot(A+B)-B\cdot N_u\right]}\right]^2}}$$

$$Den := \frac{2\cdot\left[D\cdot(C-D)\cdot(A+B)-N_u\cdot\left[B\cdot C+N_u\cdot(A+B)\right]\right]}{\sqrt{\left[2\cdot\left[D\cdot(C-D)\cdot(A+B)-N_u\cdot\left[B\cdot C+N_u\cdot(A+B)\right]\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{\sqrt{\left[2\cdot\left[D\cdot(C-D)\cdot(A+B)-N_u\cdot\left[B\cdot C+N_u\cdot(A+B)\right]\right]\right]^2}\cdot\left[B\cdot\left(D^2+N_u{}^2\right)-\sqrt{B^2\cdot\left(D^2+N_u{}^2\right)^2+4\cdot C\cdot\left[(A+B)\cdot\left(D^2-C\cdot D+N_u{}^2\right)+B\cdot C\cdot N_u\right]\cdot\left[D\cdot(A+B)-B\cdot N_u\right]}\right]}{\sqrt{\left[B\cdot\left(D^2+N_u{}^2\right)-\sqrt{B^2\cdot\left(D^2+N_u{}^2\right)^2+4\cdot C\cdot\left[(A+B)\cdot\left(D^2-C\cdot D+N_u{}^2\right)+B\cdot C\cdot N_u\right]\cdot\left[D\cdot(A+B)-B\cdot N_u\right]}\right]^2}\cdot\left[2\cdot\left[D\cdot(C-D)\cdot(A+B)-N_u\cdot\left[B\cdot C+N_u\cdot(A+B)\right]\right]\right]} = 0$$

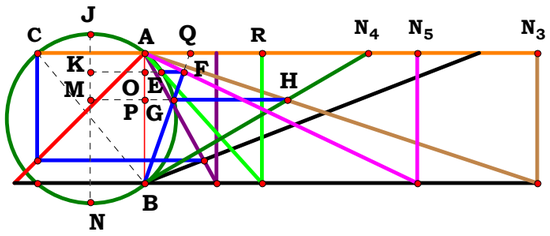
4RST3AB3R3

Unit.

$AB := 1$

Given.

$N_1 := 3.87172$ $N_2 := 1.45996$ $N_3 := .70920$ $N_4 := 1.75290$ $N_5 := 3.09945$



$N_1 = 2.56414$
$N_2 = 0.54950$
$N_3 = 3.01441$
$N_4 = 1.71415$
$N_5 = 2.09213$
$R = 0.90124$

Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $BP := \frac{AB \cdot N_3}{N_3 + N_4}$

$JN := \sqrt{AB^2 + AC^2}$ $JM := JN - \left(BP + \frac{JN - AB}{2}\right)$

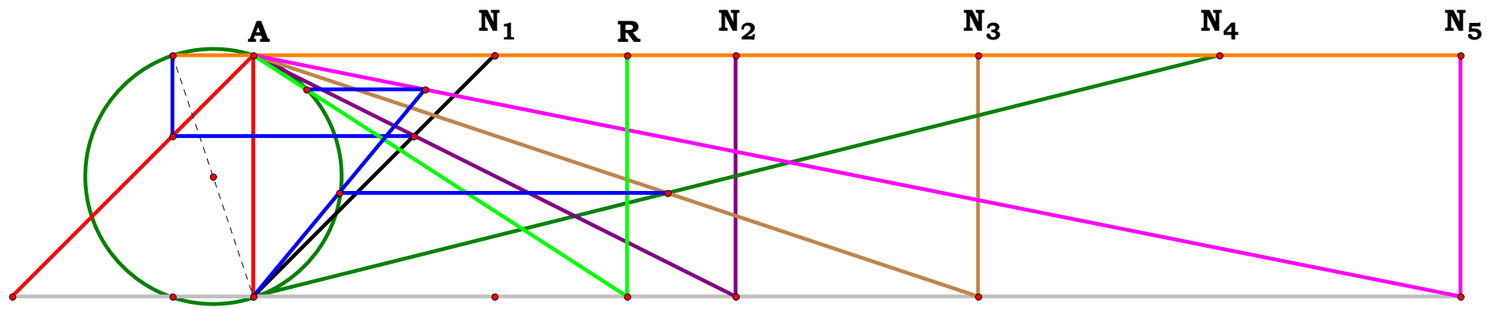
$GM := \sqrt{JM \cdot (JN - JM)}$ $PG := GM - \frac{AC}{2}$

$AQ := \frac{PG \cdot AB}{BP}$ $AO := \frac{AB \cdot AQ}{AQ + N_5}$

$JK := AO + \frac{JN - AB}{2}$ $EK := \sqrt{JK \cdot (JN - JK)}$

$EO := EK - \frac{AC}{2}$ $R := \frac{EO \cdot AB}{AO}$

$R = 0.892637$



B

$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$R = 1.54891$

$AB = 1.00000$
$AC = 0.33333$
$BP = 0.42857$
$JN = 1.05409$
$JM = 0.59847$
$GM = 0.52218$

$PG = 0.35552$
$AQ = 0.82954$
$AO = 0.14230$
$JK = 0.16935$
$EK = 0.38708$
$EO = 0.22041$

$R - \frac{EO \cdot AB}{AO} = 0.00000$

4RST3AB3R4

Unit.

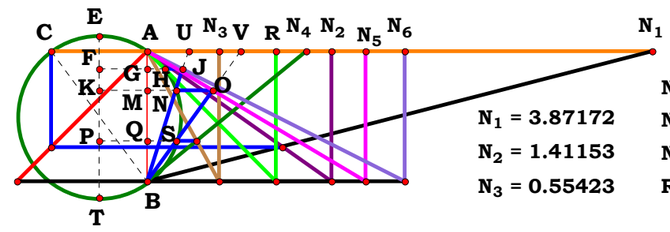
$AB := 1$

Given.

$N_1 := 3.87172$ $N_4 := 1.22018$

$N_2 := 1.41153$ $N_5 := 1.67564$

$N_3 := .55423$ $N_6 := 1.97696$



$N_1 = 3.87172$ $N_4 = 1.22018$

$N_2 = 1.41153$ $N_5 = 1.67564$

$N_3 = 0.55423$ $N_6 = 1.97696$

$R = 0.99248$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad BQ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ET := \sqrt{AB^2 + AC^2} \qquad EP := ET - \left(BQ + \frac{ET - AB}{2}\right)$$

$$PS := \sqrt{EP \cdot (ET - EP)} \qquad QS := PS - \frac{AC}{2}$$

$$AV := \frac{QS \cdot AB}{BQ}$$

$$BM := \frac{AB \cdot N_5}{AV + N_5}$$

$$KT := BM + \frac{ET - AB}{2}$$

$$KN := \sqrt{KT \cdot (ET - KT)}$$

$$MN := KN - \frac{AC}{2}$$

$$AU := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{AB \cdot N_6}{AU + N_6}$$

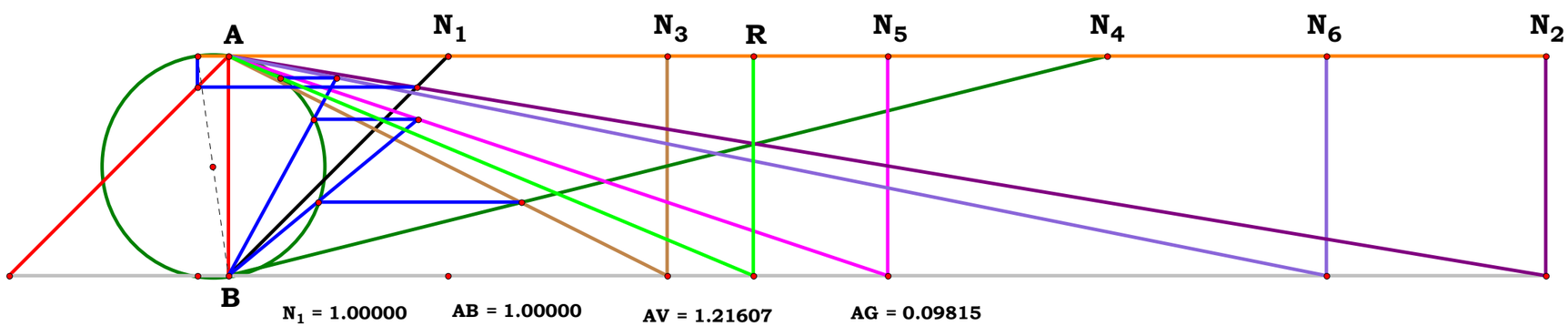
$$AG := AB - BG$$

$$EF := AG + \frac{ET - AB}{2} \qquad FH := \sqrt{EF \cdot (ET - EF)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{AG}$$

$R = 0.992484$

Definitions.



$N_1 = 1.00000$ $AB = 1.00000$ $AV = 1.21607$ $AG = 0.09815$

$N_2 = 6.00000$ $AC = 0.14286$ $BM = 0.71156$ $EF = 0.10323$

$N_3 = 2.00000$ $BQ = 0.33333$ $KT = 0.71664$ $FH = 0.30597$

$N_4 = 4.00000$ $ET = 1.01015$ $KN = 0.45863$ $GH = 0.23454$

$N_5 = 3.00000$ $EP = 0.67174$ $MN = 0.38720$ $R - \frac{GH \cdot AB}{AG} = 0.00000$

$N_6 = 5.00000$ $PS = 0.47679$ $AU = 0.54416$

$R = 2.38964$ $QS = 0.40536$ $BG = 0.90185$

4RST3AB3R5

Unit.

$AB := 1$

Given.

$N_1 := 2.80628$

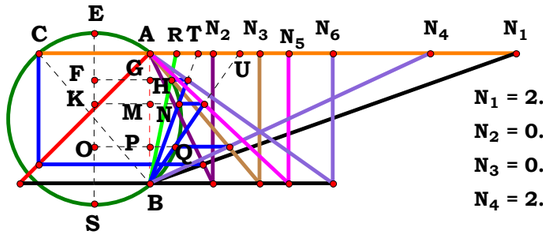
$N_2 := .48170$

$N_3 := .84480$

$N_4 := 2.15002$

$N_5 := 1.06544$

$N_6 := 1.40550$



$N_1 = 2.80628$ $N_5 = 1.06544$

$N_2 = 0.48170$ $N_6 = 1.40550$

$N_3 = 0.84480$ $R = 0.20285$

$N_4 = 2.15002$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ES := \sqrt{AB^2 + AC^2} \qquad OS := BP + \frac{ES - AB}{2}$$

$$OQ := \sqrt{OS \cdot (ES - OS)} \qquad PQ := OQ - \frac{AC}{2}$$

$$AU := \frac{PQ \cdot AB}{BP}$$

$$BM := \frac{AB \cdot N_5}{N_5 + AU}$$

$$KS := BM + \frac{ES - AB}{2}$$

$$KN := \sqrt{KS \cdot (ES - KS)}$$

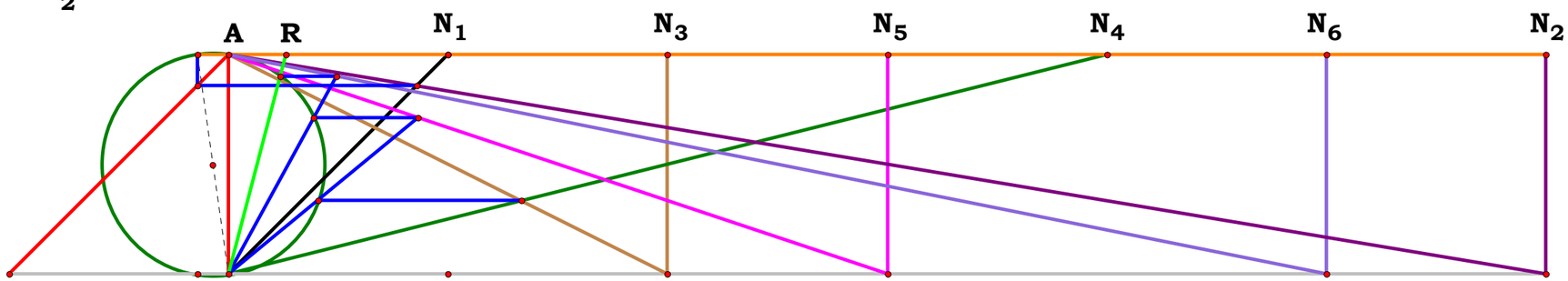
$$MN := KN - \frac{AC}{2}$$

$$AT := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{N_6 \cdot AB}{N_6 + AT} \qquad FS := BG + \frac{ES - AB}{2}$$

$$FH := \sqrt{FS \cdot (ES - FS)} \qquad GH := FH - \frac{AC}{2}$$

$$R := \frac{GH \cdot AB}{BG} \qquad R = 0.20285$$



$N_1 = 1.00000$ $AB = 1.00000$ $AU = 1.21607$ $FS = 0.90693$

$N_2 = 6.00000$ $AC = 0.14286$ $BM = 0.71156$ $FH = 0.30597$

$N_3 = 2.00000$ $BP = 0.33333$ $KS = 0.71664$ $GH = 0.23454$

$N_4 = 4.00000$ $ES = 1.01015$ $KN = 0.45863$ $R - \frac{GH \cdot AB}{BG} = 0.00000$

$N_5 = 3.00000$ $OS = 0.33841$ $MN = 0.38720$

$N_6 = 5.00000$ $OQ = 0.47679$ $AT = 0.54416$

$R = 0.26007$ $PQ = 0.40536$ $BG = 0.90185$

Definitions.

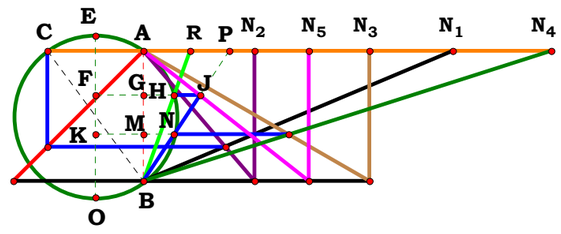
4RST3AB3R6

Unit.

$AB := 1$

Given.

$N_1 := 2.37042$ $N_2 := .84976$ $N_3 := 1.73598$ $N_4 := 3.12828$ $N_5 := 1.26884$



$N_1 = 2.37042$
$N_2 = 0.84976$
$N_3 = 1.73589$
$N_4 = 3.12828$
$N_5 = 1.26884$
$R = 0.35378$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad BM := \frac{N_3 \cdot AB}{N_3 + N_4}$$

$$EO := \sqrt{AB^2 + AC^2} \qquad KO := BM + \frac{EO - AB}{2}$$

$$KN := \sqrt{KO \cdot (EO - KO)} \qquad MN := KN - \frac{AC}{2}$$

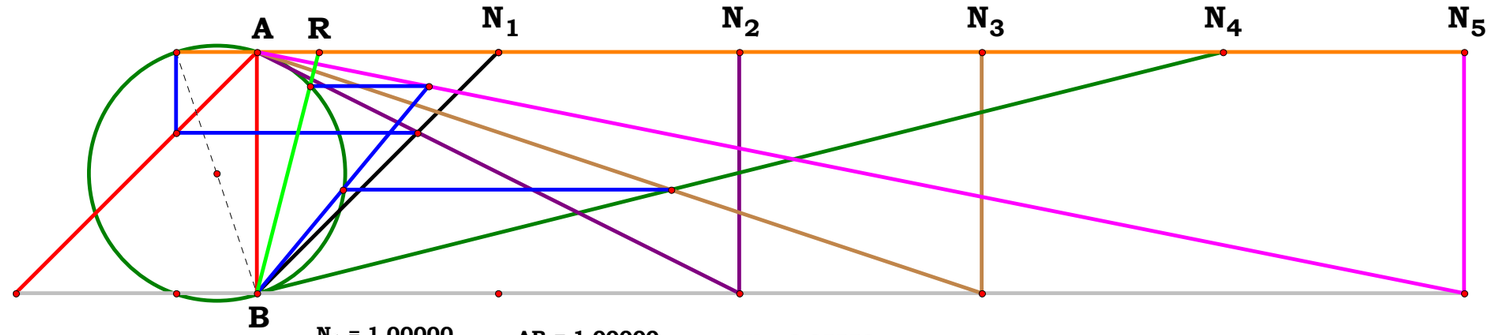
$$AP := \frac{MN \cdot AB}{BM} \qquad BG := \frac{N_5 \cdot AB}{AP + N_5}$$

$$FO := BG + \frac{EO - AB}{2} \qquad FH := \sqrt{FO \cdot (EO - FO)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{BG}$$

$R = 0.353777$

Definitions.



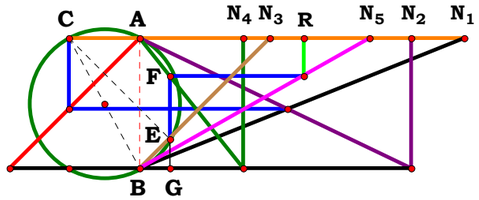
$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$R = 0.25698$

$AB = 1.00000$
$AC = 0.33333$
$BM = 0.42857$
$EO = 1.05409$
$KO = 0.45562$
$KN = 0.52218$

$MN = 0.35552$
$AP = 0.82954$
$BG = 0.85770$
$FO = 0.88475$
$FH = 0.38708$
$GH = 0.22041$

$R - \frac{GH \cdot AB}{BG} = 0.00000$

4RST3B3R7



$N_1 = 2.48665$
$N_2 = 2.07985$
$N_3 = 0.99977$
$N_4 = 0.79401$
$N_5 = 1.76281$
R = 1.25708

Unit. $AB := 1$ Given. $N_1 := 2.48665$ $N_2 := 2.07985$ $N_3 := .99977$

$N_4 := .79401$ $N_5 := 1.76281$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u^3 \cdot (A+B) + B \cdot D \cdot N_u^2 + N_u \cdot C \cdot (C-D) \cdot (A+B)}{E \cdot \left(C^2 + N_u^2\right) \cdot (A+B)} = 1.257081$$

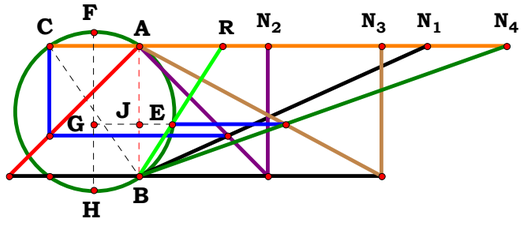
$$Num := \frac{N_u^3 \cdot (A+B) + B \cdot D \cdot N_u^2 + N_u \cdot C \cdot (C-D) \cdot (A+B)}{\sqrt{\left[N_u^3 \cdot (A+B) + B \cdot D \cdot N_u^2 + N_u \cdot C \cdot (C-D) \cdot (A+B)\right]^2}}$$

$$Den := \frac{E \cdot \left(C^2 + N_u^2\right) \cdot (A+B)}{\sqrt{\left[E \cdot \left(C^2 + N_u^2\right) \cdot (A+B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[(A+B) \cdot N_u^3 + B \cdot D \cdot N_u^2 + C \cdot (A+B) \cdot (C-D) \cdot N_u\right] \cdot \sqrt{E^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2}}{E \cdot \left(C^2 + N_u^2\right) \cdot (A+B) \cdot \sqrt{\left[(A+B) \cdot N_u^3 + B \cdot D \cdot N_u^2 + C \cdot (A+B) \cdot (C-D) \cdot N_u\right]^2}} = 0$$



$N_1 = 2.20577$
$N_2 = 0.98536$
$N_3 = 1.86181$
$N_4 = 2.81833$
$R = 0.63739$

Unit. $AB := 1$ Given. $N_1 := 2.20577$ $N_2 := .98536$ $N_3 := 1.86181$ $N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C+D)}{2\cdot D\cdot(A+B)}=0.637387$$

$$Num := \frac{\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C+D)}{\sqrt{\left[\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C+D)\right]^2}}$$

$$Den := \frac{2\cdot D\cdot(A+B)}{\sqrt{[2\cdot D\cdot(A+B)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{D^2\cdot(A+B)^2}\cdot\left[\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C+D)\right]}{D\cdot(A+B)\cdot\sqrt{\left[\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C+D)\right]^2}}=0$$

4RST3AB3R9

Unit.

$AB := 1$

Given.

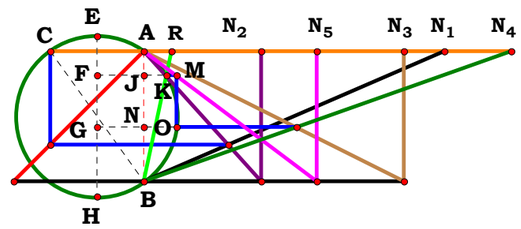
$N_1 := 2.30262$

$N_2 := .89818$

$N_3 := 1.99741$

$N_4 := 2.81833$

$N_5 := 1.32695$



$N_1 = 2.30262$
$N_2 = 0.89818$
$N_3 = 1.99741$
$N_4 = 2.81833$
$N_5 = 1.32695$
$R = 0.21169$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

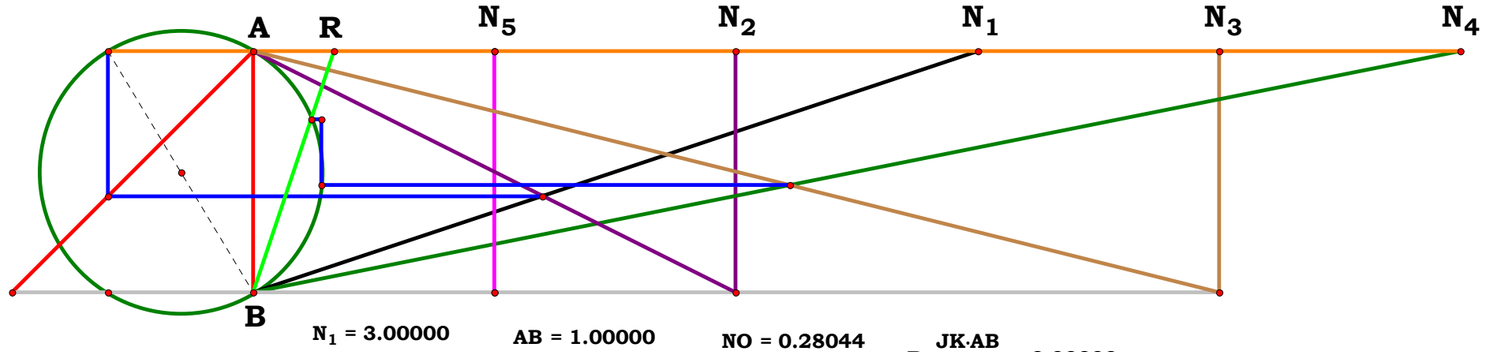
$$BN := \frac{AB \cdot N_3}{N_3 + N_4} \qquad GH := BN + \frac{EH - AB}{2}$$

$$GO := \sqrt{GH \cdot (EH - GH)} \qquad NO := GO - \frac{AC}{2}$$

$$BK := \frac{AB \cdot (N_5 - NO)}{N_5} \qquad FH := BK + \frac{EH - AB}{2}$$

$$FK := \sqrt{FH \cdot (EH - FH)} \qquad JK := FK - \frac{AC}{2}$$

$$R := \frac{JK \cdot AB}{BK} \qquad R = 0.211686$$



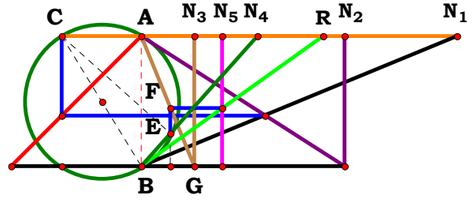
$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 1.00000$
$R = 0.33379$

$AB = 1.00000$
$AC = 0.60000$
$EH = 1.16619$
$BN = 0.44444$
$GH = 0.52754$
$GO = 0.58044$

$NO = 0.28044$
$BK = 0.71956$
$FH = 0.80265$
$FK = 0.54018$
$JK = 0.24018$

$R - \frac{JK \cdot AB}{BK} = 0.00000$

4RST3B3R10



$N_1 = 2.41885$
$N_2 = 1.55682$
$N_3 = 0.40894$
$N_4 = 0.89086$
$N_5 = 0.61989$
$R = 1.39694$

Unit. $AB := 1$ Given. $N_1 := 2.41885$ $N_2 := 1.55682$ $N_3 := .40894$

$N_4 := .89086$ $N_5 := .61989$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{E \cdot \left[\left(D^2 - C \cdot D + N_u{}^2\right) \cdot (A + B) + B \cdot C \cdot N_u\right]} = 1.396942$$

$$Num := \frac{N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

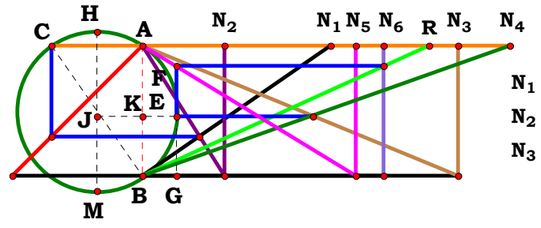
$$Den := \frac{E \cdot \left[\left(D^2 - C \cdot D + N_u{}^2\right) \cdot (A + B) + B \cdot C \cdot N_u\right]}{\sqrt{\left[E \cdot \left[\left(D^2 - C \cdot D + N_u{}^2\right) \cdot (A + B) + B \cdot C \cdot N_u\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{E^2 \cdot \left[(A + B) \cdot \left(D^2 - C \cdot D + N_u{}^2\right) + B \cdot C \cdot N_u\right]^2} \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{E \cdot \left[(A + B) \cdot \left(D^2 - C \cdot D + N_u{}^2\right) + B \cdot C \cdot N_u\right] \cdot \sqrt{N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST3B3R11



$N_1 = 1.44059$ $N_4 = 2.81833$

$N_2 = 0.62698$ $N_5 = 1.63690$

$N_3 = 2.42358$ $N_6 = 1.85104$

$R = 2.20035$

Unit. $AB := 1$ **Given.** $N_1 := 1.44059$ $N_2 := .62698$ $N_3 := 2.42358$

$N_4 := 2.81833$ $N_5 := 1.63690$ $N_6 := 1.85104$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2\cdot N_u^{\,2}\cdot(A+B)\cdot(C+D)}{F\cdot\left[(C+D)\cdot\left[B\cdot E+2\cdot N_u\cdot(A+B)\right]-E\cdot\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}\right]} = 2.200343$$

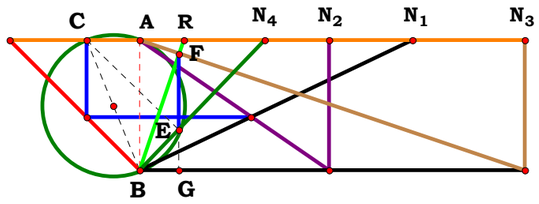
$$Num := \frac{2\cdot N_u^{\,2}\cdot(A+B)\cdot(C+D)}{\sqrt{\left[2\cdot N_u^{\,2}\cdot(A+B)\cdot(C+D)\right]^2}}$$

$$Den := \frac{F\cdot\left[(C+D)\cdot\left[B\cdot E+2\cdot N_u\cdot(A+B)\right]-E\cdot\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}\right]}{\sqrt{\left[F\cdot\left[(C+D)\cdot\left[B\cdot E+2\cdot N_u\cdot(A+B)\right]-E\cdot\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{N_u^{\,2}\cdot\sqrt{F^2\cdot\left[(C+D)\cdot\left[2\cdot N_u\cdot(A+B)+B\cdot E\right]-E\cdot\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}\right]^2}\cdot(A+B)\cdot(C+D)}{F\cdot\left[(C+D)\cdot\left[2\cdot N_u\cdot(A+B)+B\cdot E\right]-E\cdot\sqrt{B^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}\right]\cdot\sqrt{N_u^{\,4}\cdot(A+B)^2\cdot(C+D)^2}} = 0$$



$N_1 = 2.08954$
$N_2 = 1.45027$
$N_3 = 2.95630$
$N_4 = 0.95866$
$R = 0.33803$

Unit. $AB := 1$ **Given.** $N_1 := 2.08954$ $N_2 := 1.45027$ $N_3 := 2.95630$

$N_4 := .95866$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot \left[D \cdot (A + B) - A \cdot N_u\right]}{\left(D^2 - C \cdot D + N_u{}^2\right) \cdot (A + B) + A \cdot C \cdot N_u} = 0.338032$$

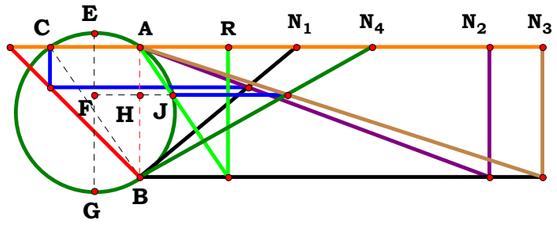
$$Num := \frac{N_u \cdot \left[D \cdot (A + B) - A \cdot N_u\right]}{\sqrt{\left[N_u \cdot \left[D \cdot (A + B) - A \cdot N_u\right]\right]^2}}$$

$$Den := \frac{\left(D^2 - C \cdot D + N_u{}^2\right) \cdot (A + B) + A \cdot C \cdot N_u}{\sqrt{\left[\left(D^2 - C \cdot D + N_u{}^2\right) \cdot (A + B) + A \cdot C \cdot N_u\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[D \cdot (A + B) - A \cdot N_u\right] \cdot \sqrt{\left[(A + B) \cdot \left(D^2 - C \cdot D + N_u{}^2\right) + A \cdot C \cdot N_u\right]^2}}{\sqrt{N_u{}^2 \cdot \left[D \cdot (A + B) - A \cdot N_u\right]^2} \cdot \left[(A + B) \cdot \left(D^2 - C \cdot D + N_u{}^2\right) + A \cdot C \cdot N_u\right]} = 0$$

4RST3B4R1



$N_1 = 1.19844$
$N_2 = 2.68037$
$N_3 = 3.09190$
$N_4 = 1.78196$
$R = 0.67615$

Unit. $AB := 1$ Given. $N_1 := 1.19844$ $N_2 := 2.68037$ $N_3 := 3.09190$

$N_4 := 1.78196$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

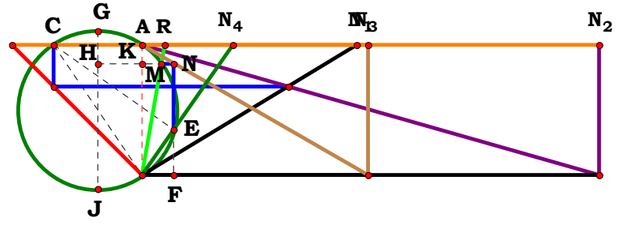
$$\frac{\sqrt{A^2 \cdot C^2 + 6 \cdot A^2 \cdot C \cdot D + A^2 \cdot D^2 + 8 \cdot A \cdot B \cdot C \cdot D + 4 \cdot B^2 \cdot C \cdot D} - A \cdot (C + D)}{2 \cdot C \cdot (A + B)} = 0.676144$$

$$Num := \frac{\sqrt{A^2 \cdot C^2 + 6 \cdot A^2 \cdot C \cdot D + A^2 \cdot D^2 + 8 \cdot A \cdot B \cdot C \cdot D + 4 \cdot B^2 \cdot C \cdot D} - A \cdot (C + D)}{\sqrt{\left[\sqrt{A^2 \cdot C^2 + 6 \cdot A^2 \cdot C \cdot D + A^2 \cdot D^2 + 8 \cdot A \cdot B \cdot C \cdot D + 4 \cdot B^2 \cdot C \cdot D} - A \cdot (C + D)\right]^2}}$$

$$Den := \frac{2 \cdot C \cdot (A + B)}{\sqrt{[2 \cdot C \cdot (A + B)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{C^2 \cdot (A + B)^2} \cdot \left[\sqrt{A^2 \cdot C^2 + 6 \cdot A^2 \cdot C \cdot D + A^2 \cdot D^2 + 8 \cdot A \cdot B \cdot C \cdot D + 4 \cdot B^2 \cdot C \cdot D} - A \cdot (C + D)\right]}{C \cdot (A + B) \cdot \sqrt{\left[\sqrt{A^2 \cdot C^2 + 6 \cdot A^2 \cdot C \cdot D + A^2 \cdot D^2 + 8 \cdot A \cdot B \cdot C \cdot D + 4 \cdot B^2 \cdot C \cdot D} - A \cdot (C + D)\right]^2}} = 0$$



$N_1 = 1.64399$
$N_2 = 3.50366$
$N_3 = 1.73589$
$N_4 = 0.69715$
$R = 0.17156$

Unit. $AB := 1$ **Given.** $N_1 := 1.64399$ $N_2 := 3.50366$ $N_3 := 1.73589$ $N_4 := .69715$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A\cdot\left(D^2+{N_u}^2\right)-\sqrt{A^2\cdot\left(D^2+{N_u}^2\right)^2+4\cdot C\cdot\left[D\cdot(A+B)-A\cdot N_u\right]\cdot\left[D^2\cdot(A+B)-C\cdot\left[D\cdot(A+B)-A\cdot N_u\right]+{N_u}^2\cdot(A+B)\right]}}{2\cdot\left[C\cdot\left(A\cdot D+B\cdot D-A\cdot N_u\right)-\left(D^2+{N_u}^2\right)\cdot(A+B)\right]}=0.171558$$

$$Num := \frac{A\cdot\left(D^2+{N_u}^2\right)-\sqrt{A^2\cdot\left(D^2+{N_u}^2\right)^2+4\cdot C\cdot\left[D\cdot(A+B)-A\cdot N_u\right]\cdot\left[D^2\cdot(A+B)-C\cdot\left[D\cdot(A+B)-A\cdot N_u\right]+{N_u}^2\cdot(A+B)\right]}}{\sqrt{\left[A\cdot\left(D^2+{N_u}^2\right)-\sqrt{A^2\cdot\left(D^2+{N_u}^2\right)^2+4\cdot C\cdot\left[D\cdot(A+B)-A\cdot N_u\right]\cdot\left[D^2\cdot(A+B)-C\cdot\left[D\cdot(A+B)-A\cdot N_u\right]+{N_u}^2\cdot(A+B)\right]}\right]^2}}$$

$$Den := \frac{2\cdot\left[C\cdot\left(A\cdot D+B\cdot D-A\cdot N_u\right)-\left(D^2+{N_u}^2\right)\cdot(A+B)\right]}{\sqrt{\left[2\cdot\left[C\cdot\left(A\cdot D+B\cdot D-A\cdot N_u\right)-\left(D^2+{N_u}^2\right)\cdot(A+B)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L-\frac{\sqrt{\left[2\cdot C\cdot\left(A\cdot D+B\cdot D-A\cdot N_u\right)-2\cdot\left(D^2+{N_u}^2\right)\cdot(A+B)\right]^2}\cdot\left[A\cdot\left(D^2+{N_u}^2\right)-\sqrt{A^2\cdot\left(D^2+{N_u}^2\right)^2+4\cdot C\cdot\left[D\cdot(A+B)-A\cdot N_u\right]\cdot\left[D^2\cdot(A+B)-C\cdot\left[D\cdot(A+B)-A\cdot N_u\right]+{N_u}^2\cdot(A+B)\right]}\right]}{\left[2\cdot C\cdot\left(A\cdot D+B\cdot D-A\cdot N_u\right)-2\cdot\left(D^2+{N_u}^2\right)\cdot(A+B)\right]\cdot\sqrt{\left[A\cdot\left(D^2+{N_u}^2\right)-\sqrt{A^2\cdot\left(D^2+{N_u}^2\right)^2+4\cdot C\cdot\left[D\cdot(A+B)-A\cdot N_u\right]\cdot\left[D^2\cdot(A+B)-C\cdot\left[D\cdot(A+B)-A\cdot N_u\right]+{N_u}^2\cdot(A+B)\right]}\right]^2}}=0$$

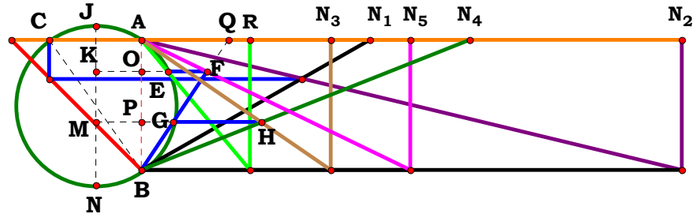
4RST3AB4R3

Unit.

$AB := 1$

Given.

$N_1 := 1.75053$ $N_2 := 4.14292$ $N_3 := 1.45500$ $N_4 := 2.51808$ $N_5 := 2.06307$



$N_1 = 1.75053$
$N_2 = 4.14292$
$N_3 = 1.45500$
$N_4 = 2.51808$
$N_5 = 2.06307$
$R = 0.83282$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$JN := \sqrt{AB^2 + AC^2} \qquad JM := JN - \left(BP + \frac{JN - AB}{2}\right)$$

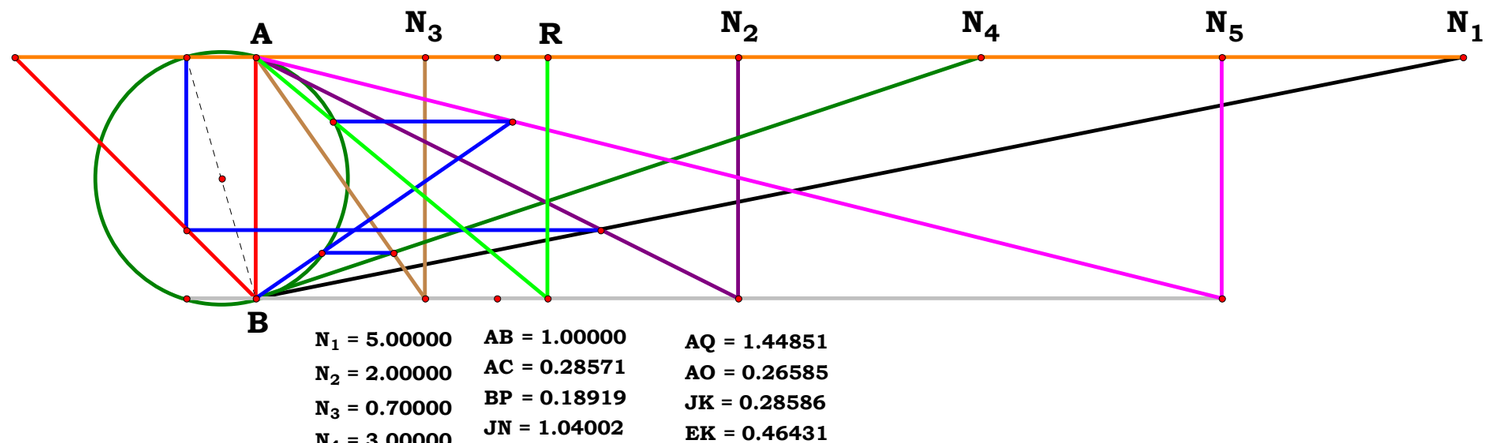
$$GM := \sqrt{JM \cdot (JN - JM)} \qquad PG := GM - \frac{AC}{2}$$

$$AQ := \frac{PG \cdot AB}{BP} \qquad AO := \frac{AB \cdot AQ}{AQ + N_5}$$

$$JK := AO + \frac{JN - AB}{2} \qquad EK := \sqrt{JK \cdot (JN - JK)}$$

$$EO := EK - \frac{AC}{2} \qquad R := \frac{EO \cdot AB}{AO}$$

$R = 0.832823$



$N_1 = 5.00000$ $AB = 1.00000$ $AQ = 1.44851$
$N_2 = 2.00000$ $AC = 0.28571$ $AO = 0.26585$
$N_3 = 0.70000$ $BP = 0.18919$ $JK = 0.28586$
$N_4 = 3.00000$ $JN = 1.04002$ $EK = 0.46431$
$N_5 = 4.00000$ $JM = 0.83082$ $EO = 0.32145$
$R = 1.20913$ $GM = 0.41690$ $R - \frac{EO \cdot AB}{AO} = 0.00000$
$PG = 0.27404$

4RST3AB4R4

Unit.

$AB := 1$

Given.

$N_1 := 1.75053$

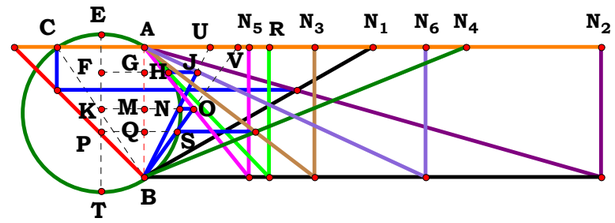
$N_2 := 3.50366$

$N_3 := 1.30972$

$N_4 := 2.46965$

$N_5 := .80392$

$N_6 := 2.15993$



$N_1 = 1.75053$
$N_2 = 3.50366$
$N_3 = 1.30972$
$N_4 = 2.46965$
$N_5 = 0.80392$
$N_6 = 2.15993$
$R = 0.95638$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad BQ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ET := \sqrt{AB^2 + AC^2} \qquad EP := ET - \left(BQ + \frac{ET - AB}{2}\right)$$

$$PS := \sqrt{EP \cdot (ET - EP)} \qquad QS := PS - \frac{AC}{2}$$

$$AV := \frac{QS \cdot AB}{BQ}$$

$$BM := \frac{AB \cdot N_5}{AV + N_5}$$

$$KT := BM + \frac{ET - AB}{2}$$

$$KN := \sqrt{KT \cdot (ET - KT)}$$

$$MN := KN - \frac{AC}{2}$$

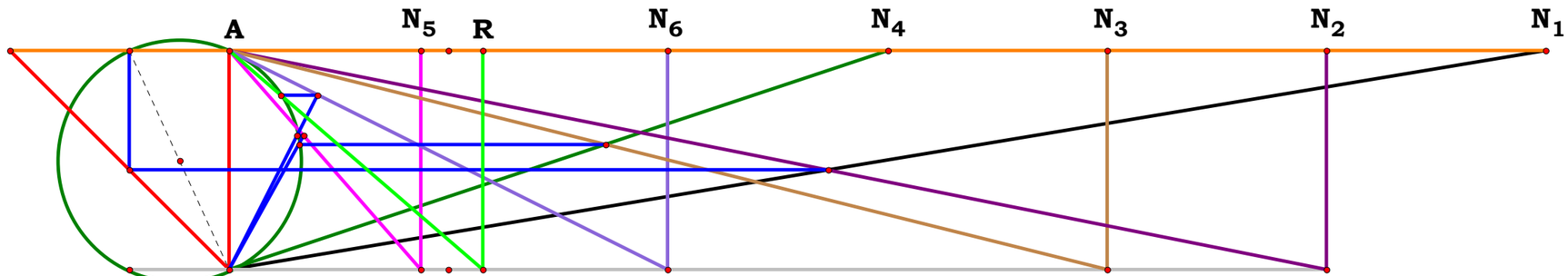
$$AU := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{AB \cdot N_6}{AU + N_6} \qquad AG := AB - BG$$

$$EF := AG + \frac{ET - AB}{2} \qquad FH := \sqrt{EF \cdot (ET - EF)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{AG}$$

$R = 0.956384$



$N_1 = 6.00000$
$N_2 = 5.00000$
$N_3 = 4.00000$
$N_4 = 3.00000$
$N_5 = 0.87451$
$N_6 = 2.00000$
$R = 1.15772$

$AB = 1.00000$
$AC = 0.45455$
$BQ = 0.57143$
$ET = 1.09846$
$EP = 0.47780$
$PS = 0.54456$
$QS = 0.31729$

$AV = 0.55526$
$BM = 0.61164$
$KT = 0.66087$
$KN = 0.53776$
$MN = 0.31049$
$AU = 0.50763$
$BG = 0.79756$

$AG = 0.20244$
$EF = 0.25166$
$FH = 0.46164$
$GH = 0.23436$
$R - \frac{GH \cdot AB}{AG} = 0.00000$

Definitions.

4RST3AB4R5

Unit.

$AB := 1$

Given.

$N_1 := 1.47933$

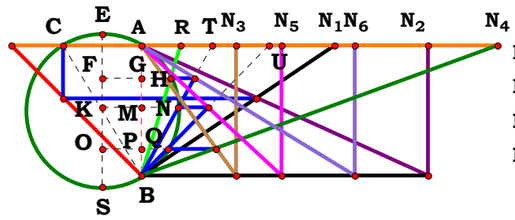
$N_2 := 2.19608$

$N_3 := .72857$

$N_4 := 2.73116$

$N_5 := 1.07512$

$N_6 := 1.63690$



$N_1 = 1.47933$ $N_5 = 1.07512$

$N_2 = 2.19608$ $N_6 = 1.63690$

$N_3 = 0.72857$ $R = 0.30175$

$N_4 = 2.73116$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ES := \sqrt{AB^2 + AC^2} \qquad OS := BP + \frac{ES - AB}{2}$$

$$OQ := \sqrt{OS \cdot (ES - OS)} \qquad PQ := OQ - \frac{AC}{2}$$

$$AU := \frac{PQ \cdot AB}{BP}$$

$$BM := \frac{AB \cdot N_5}{N_5 + AU}$$

$$KS := BM + \frac{ES - AB}{2}$$

$$KN := \sqrt{KS \cdot (ES - KS)}$$

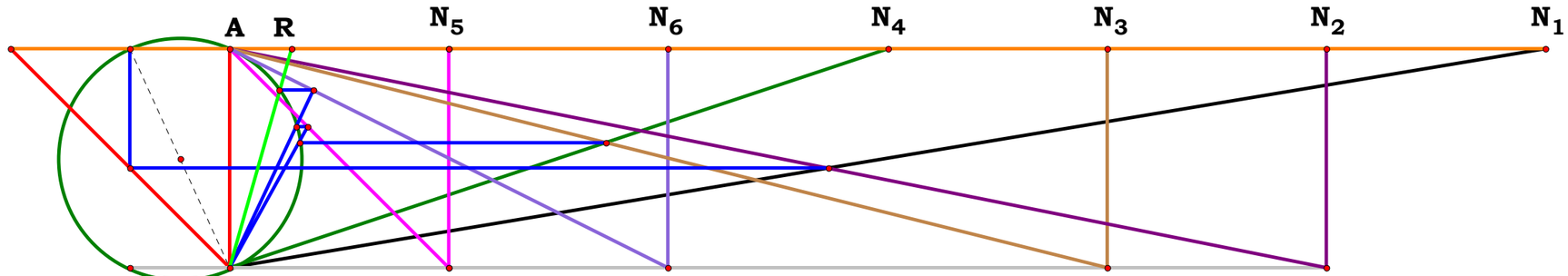
$$MN := KN - \frac{AC}{2}$$

$$AT := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{N_6 \cdot AB}{N_6 + AT} \qquad FS := BG + \frac{ES - AB}{2}$$

$$FH := \sqrt{FS \cdot (ES - FS)} \qquad GH := FH - \frac{AC}{2}$$

$$R := \frac{GH \cdot AB}{BG} \qquad R = 0.301751$$



$N_1 = 6.00000$ $AB = 1.00000$ $AU = 0.55526$ $FS = 0.85853$

$N_2 = 5.00000$ $AC = 0.45455$ $BM = 0.64298$ $FH = 0.45386$

$N_3 = 4.00000$ $BP = 0.57143$ $KS = 0.69221$ $GH = 0.22659$

$N_4 = 3.00000$ $ES = 1.09846$ $KN = 0.53029$ $R - \frac{GH \cdot AB}{BG} = 0.00000$

$N_5 = 1.00000$ $OS = 0.62066$ $MN = 0.30302$

$N_6 = 2.00000$ $OQ = 0.54456$ $AT = 0.47127$

$R = 0.27998$ $PQ = 0.31729$ $BG = 0.80930$

Definitions.

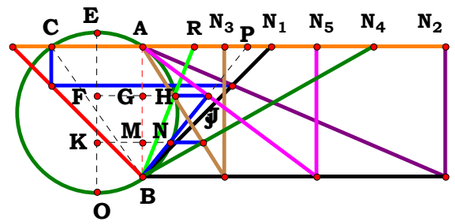
4RST3AB4R6

Unit.

$AB := 1$

Given.

$N_1 := .98536$ $\quad N_2 := 2.3220$ $\quad N_3 := .63171$ $\quad N_4 := 1.77227$ $\quad N_5 := 1.33664$



$N_1 = 0.98536$
$N_2 = 2.32200$
$N_3 = 0.63171$
$N_4 = 1.77227$
$N_5 = 1.33664$
$R = 0.39643$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad BM := \frac{N_3 \cdot AB}{N_3 + N_4}$$

$$EO := \sqrt{AB^2 + AC^2} \qquad KO := BM + \frac{EO - AB}{2}$$

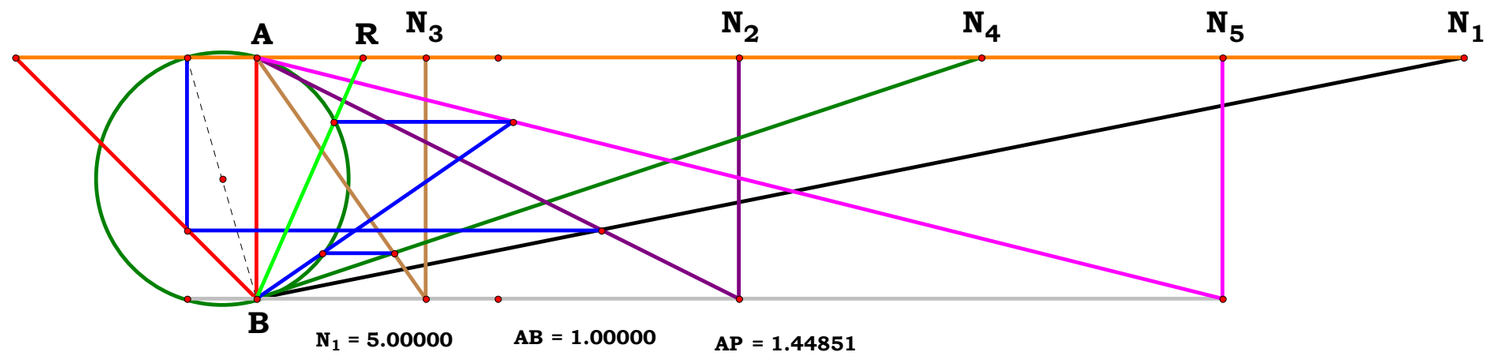
$$KN := \sqrt{KO \cdot (EO - KO)} \qquad MN := KN - \frac{AC}{2}$$

$$AP := \frac{MN \cdot AB}{BM} \qquad BG := \frac{N_5 \cdot AB}{AP + N_5}$$

$$FO := BG + \frac{EO - AB}{2} \qquad FH := \sqrt{FO \cdot (EO - FO)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{BG}$$

$R = 0.396433$

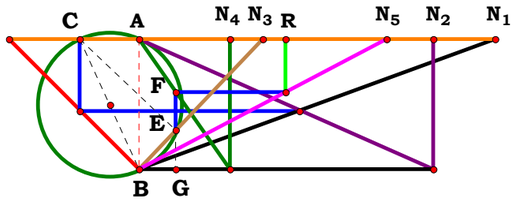


$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 0.70000$
$N_4 = 3.00000$
$N_5 = 4.00000$
$R = 0.43786$

$AB = 1.00000$
$AC = 0.28571$
$BM = 0.18919$
$EO = 1.04002$
$KO = 0.20920$
$KN = 0.41690$
$MN = 0.27404$

$AP = 1.44851$
$BG = 0.73415$
$FO = 0.75415$
$FH = 0.46431$
$GH = 0.32145$
$R - \frac{GH \cdot AB}{BG} = 0.00000$

Definitions.



$N_1 = 2.72880$
$N_2 = 2.25419$
$N_3 = 0.95134$
$N_4 = 0.69715$
$N_5 = 1.89841$
$R = 1.12379$

Unit. $AB := 1$ Given. $N_1 := 2.72880$ $N_2 := 2.25419$ $N_3 := .95134$ $N_4 := .69715$ $N_5 := 1.89841$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 - D \cdot C + N_u^2\right) \cdot (A + B) + A \cdot D \cdot N_u^2}{E \cdot \left(C^2 + N_u^2\right) \cdot (A + B)} = 1.123786$$

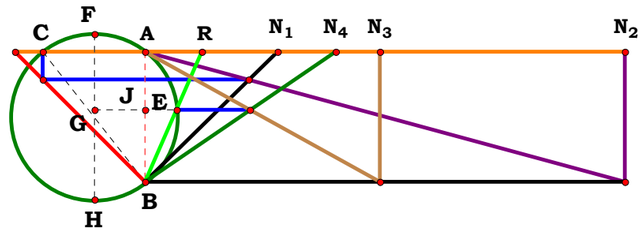
$$Num := \frac{N_u \cdot \left(C^2 - D \cdot C + N_u^2\right) \cdot (A + B) + A \cdot D \cdot N_u^2}{\sqrt{\left[N_u \cdot \left(C^2 - D \cdot C + N_u^2\right) \cdot (A + B) + A \cdot D \cdot N_u^2\right]^2}}$$

$$Den := \frac{E \cdot \left(C^2 + N_u^2\right) \cdot (A + B)}{\sqrt{\left[E \cdot \left(C^2 + N_u^2\right) \cdot (A + B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[N_u \cdot (A + B) \cdot \left(C^2 - D \cdot C + N_u^2\right) + A \cdot D \cdot N_u^2\right] \cdot \sqrt{E^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A + B)^2}}{E \cdot \left(C^2 + N_u^2\right) \cdot (A + B) \cdot \sqrt{\left[N_u \cdot (A + B) \cdot \left(C^2 - D \cdot C + N_u^2\right) + A \cdot D \cdot N_u^2\right]^2}} = 0$$



$N_1 = 1.01441$
$N_2 = 3.67800$
$N_3 = 1.80369$
$N_4 = 1.46232$
$R = 0.43680$

Unit. $AB := 1$ **Given.** $N_1 := 1.01441$ $N_2 := 3.67800$ $N_3 := 1.8036$ $N_4 := 1.46232$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot(C+D)}{2\cdot D\cdot(A+B)} = 0.436811$$

$$Num := \frac{\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot(C+D)}{\sqrt{\left[\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot(C+D)\right]^2}}$$

$$Den := \frac{2\cdot D\cdot(A+B)}{\sqrt{[2\cdot D\cdot(A+B)]^2}} \qquad L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{\sqrt{D^2\cdot(A+B)^2}\cdot\left[\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot(C+D)\right]}{D\cdot(A+B)\cdot\sqrt{\left[\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot(C+D)\right]^2}} = 0$$

4RST3AB4R9

Unit.

$AB := 1$

Given.

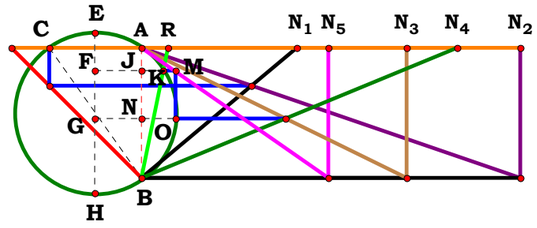
$N_1 := 1.18876$

$N_2 := 2.90314$

$N_3 := 2.03615$

$N_4 := 2.42122$

$N_5 := 1.4335$



$N_1 = 1.18876$

$N_2 = 2.90314$

$N_3 = 2.03615$

$N_4 = 2.42122$

$N_5 = 1.43350$

$R = 0.20423$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

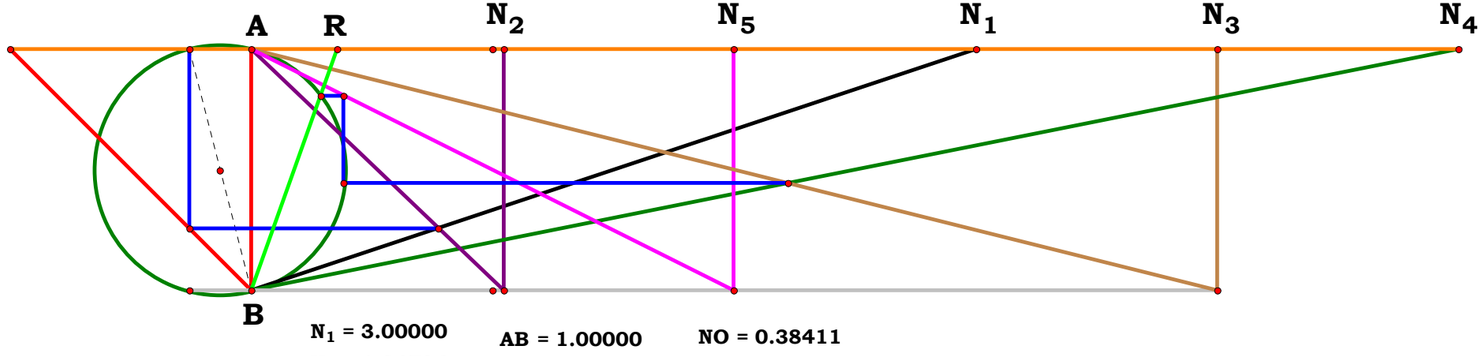
$$BN := \frac{AB \cdot N_3}{N_3 + N_4} \qquad GH := BN + \frac{EH - AB}{2}$$

$$GO := \sqrt{GH \cdot (EH - GH)} \qquad NO := GO - \frac{AC}{2}$$

$$BK := \frac{AB \cdot (N_5 - NO)}{N_5} \qquad FH := BK + \frac{EH - AB}{2}$$

$$FK := \sqrt{FH \cdot (EH - FH)} \qquad JK := FK - \frac{AC}{2}$$

$$R := \frac{JK \cdot AB}{BK} \qquad R = 0.204231$$



$N_1 = 3.00000$

$N_2 = 1.04706$

$N_3 = 4.00000$

$N_4 = 5.00000$

$N_5 = 2.00000$

$R = 0.35306$

$AB = 1.00000$

$AC = 0.25872$

$EH = 1.03293$

$BN = 0.44444$

$GH = 0.46091$

$GO = 0.51347$

$NO = 0.38411$

$BK = 0.80795$

$FH = 0.82441$

$FK = 0.41461$

$JK = 0.28525$

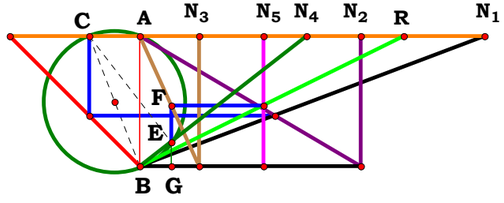
$R - \frac{JK \cdot AB}{BK} = 0.00000$

Definitions.

$$R - \frac{N_5 \cdot \sqrt{(N_3 + N_4)^2} \cdot \left[\sqrt{(N_3 + N_4) \cdot \left[2 \cdot \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4} \cdot \sqrt{(N_3 + N_4)^2} \cdot (AC + N_5) + 4 \cdot N_3{}^2 \ \ldots \right.} \right.}{\left. \left. + (N_3 + N_4) \cdot \left[(N_3 + N_4) \cdot \left[AC^2 \cdot (N_5{}^2 - 2) - 2 \cdot AC \cdot N_5 \right] - 4 \cdot N_3 \right] \right] - AC \cdot \sqrt{N_5{}^2 \cdot (N_3 + N_4)^3} \right]}{\sqrt{N_5{}^2 \cdot (N_3 + N_4)^3} \cdot \left[AC \cdot \sqrt{(N_3 + N_4)^2} - \sqrt{AC^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4} + 2 \cdot N_5 \cdot \sqrt{(N_3 + N_4)^2} \right]} = 0$$

$$R - \frac{N_5 \cdot \sqrt{(N_3 + N_4)^2} \cdot \left[\sqrt{(N_3 + N_4) \cdot \left[2 \cdot \sqrt{\left(\frac{N_2}{N_1 + N_2} \right)^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4} \cdot \sqrt{(N_3 + N_4)^2} \cdot \left(\frac{N_2}{N_1 + N_2} + N_5 \right) + 4 \cdot N_3{}^2 \ \ldots \right.} \right.}{\left. \left. + (N_3 + N_4) \cdot \left[(N_3 + N_4) \cdot \left[\left(\frac{N_2}{N_1 + N_2} \right)^2 \cdot (N_5{}^2 - 2) - 2 \cdot \frac{N_2}{N_1 + N_2} \cdot N_5 \right] - 4 \cdot N_3 \right] \right] - \frac{N_2}{N_1 + N_2} \cdot \sqrt{N_5{}^2 \cdot (N_3 + N_4)^3} \right]}{\sqrt{N_5{}^2 \cdot (N_3 + N_4)^3} \cdot \left[\frac{N_2}{N_1 + N_2} \cdot \sqrt{(N_3 + N_4)^2} - \sqrt{\left(\frac{N_2}{N_1 + N_2} \right)^2 \cdot (N_3 + N_4)^2 + 4 \cdot N_3 \cdot N_4} + 2 \cdot N_5 \cdot \sqrt{(N_3 + N_4)^2} \right]} = 0$$

4RST3B4R10



$N_1 = 2.64163$
$N_2 = 1.69242$
$N_3 = 0.45737$
$N_4 = 1.27829$
$N_5 = 0.94921$
$R = 2.02571$

Unit. $AB := 1$ Given. $N_1 := 2.64163$ $N_2 := 1.69242$ $N_3 := .45737$

$N_4 := 1.27829$ $N_5 := .94921$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

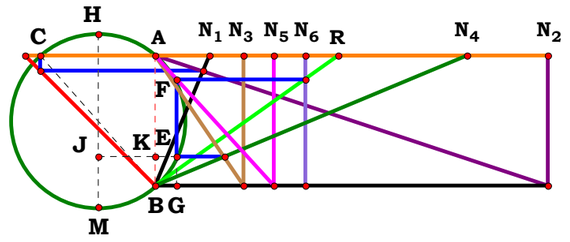
$$\frac{N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{E \cdot \left[(A + B) \cdot N_u{}^2 + A \cdot C \cdot N_u + -D \cdot (C - D) \cdot (A + B)\right]} = 2.025711$$

$$Num := \frac{N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{E \cdot \left[(A + B) \cdot N_u{}^2 + A \cdot C \cdot N_u + -D \cdot (C - D) \cdot (A + B)\right]}{\sqrt{\left[E \cdot \left[(A + B) \cdot N_u{}^2 + A \cdot C \cdot N_u + -D \cdot (C - D) \cdot (A + B)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{E^2 \cdot \left[(A + B) \cdot N_u{}^2 + A \cdot C \cdot N_u - D \cdot (A + B) \cdot (C - D)\right]^2} \cdot \left(D^2 + N_u{}^2\right) \cdot (A + B)}{E \cdot \left[(A + B) \cdot N_u{}^2 + A \cdot C \cdot N_u - D \cdot (A + B) \cdot (C - D)\right] \cdot \sqrt{N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$



$N_1 = 0.41390$
$N_2 = 3.00969$
$N_3 = 0.68014$
$N_4 = 2.39216$
$N_5 = 0.91046$
$N_6 = 1.15261$
$R = 1.40787$

Unit. $AB := 1$ **Given.** $N_1 := .41390$ $N_2 := 3.00969$ $N_3 := .68014$ $N_4 := 2.39216$ $N_5 := .91046$ $N_6 := 1.15261$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2\cdot N_u^{\,2}\cdot(A+B)\cdot(C+D)}{F\cdot\left[(C+D)\cdot\left[A\cdot E+2\cdot N_u\cdot(A+B)\right]-E\cdot\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}\right]}=1.407873$$

$$Num := \frac{2\cdot N_u^{\,2}\cdot(A+B)\cdot(C+D)}{\sqrt{\left[2\cdot N_u^{\,2}\cdot(A+B)\cdot(C+D)\right]^2}}$$

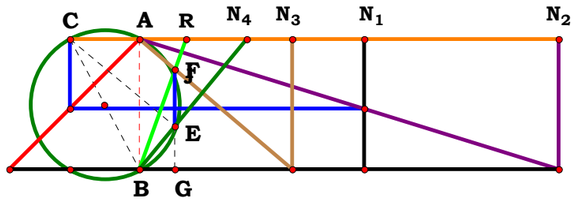
$$Den := \frac{F\cdot\left[(C+D)\cdot\left[A\cdot E+2\cdot N_u\cdot(A+B)\right]-E\cdot\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}\right]}{\sqrt{\left[F\cdot\left[(C+D)\cdot\left[A\cdot E+2\cdot N_u\cdot(A+B)\right]-E\cdot\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{N_u^{\,2}\cdot\sqrt{F^2\cdot\left[(C+D)\cdot\left[2\cdot N_u\cdot(A+B)+A\cdot E\right]-E\cdot\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}\right]^2}\cdot(A+B)\cdot(C+D)}{F\cdot\left[(C+D)\cdot\left[2\cdot N_u\cdot(A+B)+A\cdot E\right]-E\cdot\sqrt{A^2\cdot\left(C^2+D^2\right)+2\cdot C\cdot D\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}\right]\cdot\sqrt{N_u^{\,4}\cdot(A+B)^2\cdot(C+D)^2}}=0$$

4RST3B5R0



$N_1 = 1.72148$
$N_2 = 3.21309$
$N_3 = 1.17412$
$N_4 = 0.82306$
$R = 0.35791$

Unit. $AB := 1$ Given. $N_1 := 1.72148$ $N_2 := 3.21309$ $N_3 := 1.17412$

$N_4 := .82306$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A \cdot D - B \cdot N_u)}{A \cdot D^2 - A \cdot C \cdot D + A \cdot N_u^2 + B \cdot C \cdot N_u} = 0.357913$$

$$Num := \frac{N_u \cdot (A \cdot D - B \cdot N_u)}{\sqrt{[N_u \cdot (A \cdot D - B \cdot N_u)]^2}}$$

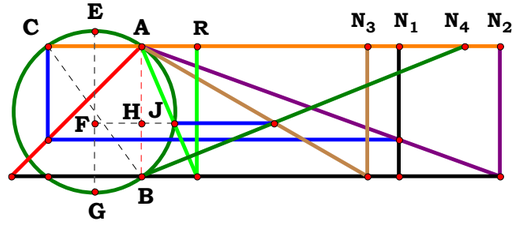
$$Den := \frac{A \cdot D^2 - A \cdot C \cdot D + A \cdot N_u^2 + B \cdot C \cdot N_u}{\sqrt{(A \cdot D^2 - A \cdot C \cdot D + A \cdot N_u^2 + B \cdot C \cdot N_u)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{(A \cdot D^2 - A \cdot C \cdot D + A \cdot N_u^2 + B \cdot C \cdot N_u)^2} \cdot (A \cdot D - B \cdot N_u)}{\sqrt{N_u^2 \cdot (A \cdot D - B \cdot N_u)^2} \cdot (A \cdot D^2 - A \cdot C \cdot D + A \cdot N_u^2 + B \cdot C \cdot N_u)} = 0$$

4RST3B5R1



$N_1 = 1.97331$

$N_2 = 2.74817$

$N_3 = 1.73589$

$N_4 = 2.47933$

$R = 0.42533$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := 1.73589$

$N_4 := 2.47933$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{4\cdot A^2\cdot C\cdot D + B^2\cdot C^2 + 2\cdot B^2\cdot C\cdot D + B^2\cdot D^2} - B\cdot(C+D)}{2\cdot A\cdot C} = 0.425332$$

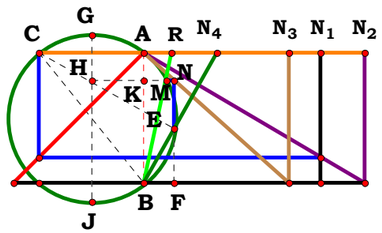
$$Num := \frac{\sqrt{4\cdot A^2\cdot C\cdot D + B^2\cdot C^2 + 2\cdot B^2\cdot C\cdot D + B^2\cdot D^2} - B\cdot(C+D)}{\sqrt{\left[\sqrt{4\cdot A^2\cdot C\cdot D + B^2\cdot C^2 + 2\cdot B^2\cdot C\cdot D + B^2\cdot D^2} - B\cdot(C+D)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot C}{\sqrt{(2\cdot A\cdot C)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{4\cdot A^2\cdot C\cdot D + B^2\cdot C^2 + 2\cdot B^2\cdot C\cdot D + B^2\cdot D^2} - B\cdot(C+D)\right]\cdot\sqrt{A^2\cdot C^2}}{A\cdot C\cdot\sqrt{\left[\sqrt{4\cdot A^2\cdot C\cdot D + B^2\cdot C^2 + 2\cdot B^2\cdot C\cdot D + B^2\cdot D^2} - B\cdot(C+D)\right]^2}} = 0$$



$N_1 = 1.35342$
$N_2 = 1.69242$
$N_3 = 1.11600$
$N_4 = 0.56155$
$R = 0.21705$

Unit. $AB := 1$ **Given.** $N_1 := 1.35342$ $N_2 := 1.69242$ $N_3 := 1.11600$ $N_4 := .56155$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B\cdot\left(D^2+N_u{}^2\right)-\sqrt{B^2\cdot\left(D^2+N_u{}^2\right)^2-4\cdot C^2\cdot\left(A\cdot D-B\cdot N_u\right)^2+4\cdot A\cdot C\cdot\left(D^2+N_u{}^2\right)\cdot\left(A\cdot D-B\cdot N_u\right)}}{2\cdot\left[A\cdot D\cdot(C-D)-N_u\cdot\left(B\cdot C+A\cdot N_u\right)\right]} = 0.217052$$

$$Num := B\cdot\left(D^2+N_u{}^2\right)-\sqrt{B^2\cdot\left(D^2+N_u{}^2\right)^2-4\cdot C^2\cdot\left(A\cdot D-B\cdot N_u\right)^2+4\cdot A\cdot C\cdot\left(D^2+N_u{}^2\right)\cdot\left(A\cdot D-B\cdot N_u\right)}$$

$$Den := \sqrt{\left[B\cdot\left(D^2+N_u{}^2\right)-\sqrt{B^2\cdot\left(D^2+N_u{}^2\right)^2-4\cdot C^2\cdot\left(A\cdot D-B\cdot N_u\right)^2+4\cdot A\cdot C\cdot\left(D^2+N_u{}^2\right)\cdot\left(A\cdot D-B\cdot N_u\right)}\right]^2}$$

$$L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{\left[B\cdot\left(D^2+N_u{}^2\right)-\sqrt{B^2\cdot\left(D^2+N_u{}^2\right)^2-4\cdot C^2\cdot\left(A\cdot D-B\cdot N_u\right)^2+4\cdot A\cdot C\cdot\left(D^2+N_u{}^2\right)\cdot\left(A\cdot D-B\cdot N_u\right)}\right]\cdot\sqrt{\left[2\cdot\left[A\cdot D\cdot(C-D)-N_u\cdot\left(B\cdot C+A\cdot N_u\right)\right]\right]^2}}{\sqrt{\left[B\cdot\left(D^2+N_u{}^2\right)-\sqrt{B^2\cdot\left(D^2+N_u{}^2\right)^2-4\cdot C^2\cdot\left(A\cdot D-B\cdot N_u\right)^2+4\cdot A\cdot C\cdot\left(D^2+N_u{}^2\right)\cdot\left(A\cdot D-B\cdot N_u\right)}\right]^2}\cdot\left[2\cdot\left[A\cdot D\cdot(C-D)-N_u\cdot\left(B\cdot C+A\cdot N_u\right)\right]\right]} = 0$$

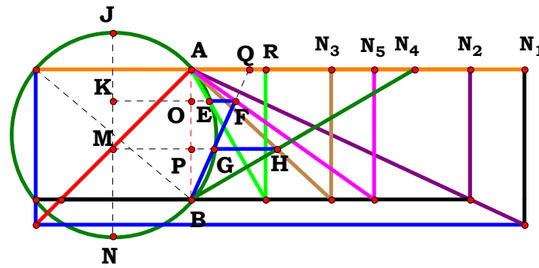
4RST3AB5R3

Unit.

$AB := 1$

Given.

$N_1 := 2.55445$ $N_2 := 2.13797$ $N_3 := 1.07726$ $N_4 := 1.71415$ $N_5 := 1.40444$



$N_1 = 2.55445$
$N_2 = 2.13797$
$N_3 = 1.07726$
$N_4 = 1.71415$
$N_5 = 1.40444$
$R = 0.56869$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$JN := \sqrt{AB^2 + AC^2} \qquad JM := JN - \left(BP + \frac{JN - AB}{2}\right)$$

$$GM := \sqrt{JM \cdot (JN - JM)}$$

$$PG := GM - \frac{AC}{2}$$

$$AQ := \frac{PG \cdot AB}{BP}$$

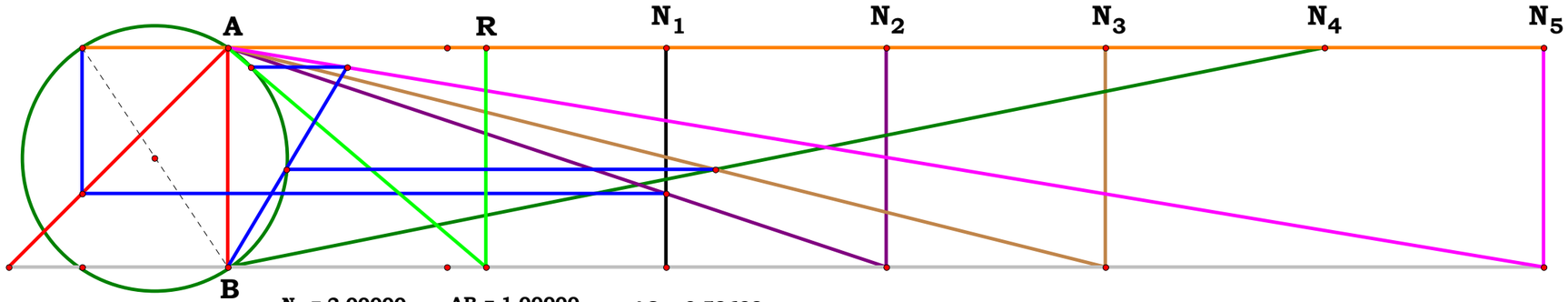
$$AO := \frac{AB \cdot AQ}{AQ + N_5}$$

$$JK := AO + \frac{JN - AB}{2}$$

$$EK := \sqrt{JK \cdot (JN - JK)}$$

$$EO := EK - \frac{AC}{2} \qquad R := \frac{EO \cdot AB}{AO}$$

$R = 0.568687$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 6.00000$
$R = 1.17666$

$AB = 1.00000$
$AC = 0.66667$
$BP = 0.44444$
$JN = 1.20185$
$JM = 0.65648$
$GM = 0.59835$
$PG = 0.26502$

$AQ = 0.59629$
$AO = 0.09040$
$JK = 0.19132$
$EK = 0.43970$
$EO = 0.10637$
$R - \frac{EO \cdot AB}{AO} = 0.00000$

4RST3AB5R4

Unit.

$AB := 1$

Given.

$N_1 := 1.77959$

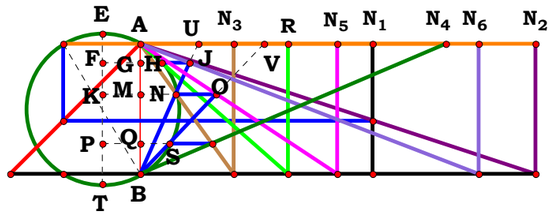
$N_2 := 3.02906$

$N_3 := .71888$

$N_4 := 2.34373$

$N_5 := 1.51098$

$N_6 := 2.59579$



$N_1 = 1.77959$
$N_2 = 3.02906$
$N_3 = 0.71888$
$N_4 = 2.34373$
$N_5 = 1.51098$
$N_6 = 2.59579$
$R = 1.13216$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad BQ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ET := \sqrt{AB^2 + AC^2} \qquad EP := ET - \left(BQ + \frac{ET - AB}{2}\right)$$

$$PS := \sqrt{EP \cdot (ET - EP)} \qquad QS := PS - \frac{AC}{2}$$

$$AV := \frac{QS \cdot AB}{BQ} \qquad BM := \frac{AB \cdot N_5}{AV + N_5}$$

$$KT := BM + \frac{ET - AB}{2}$$

$$KN := \sqrt{KT \cdot (ET - KT)}$$

$$MN := KN - \frac{AC}{2}$$

$$AU := \frac{MN \cdot AB}{BM}$$

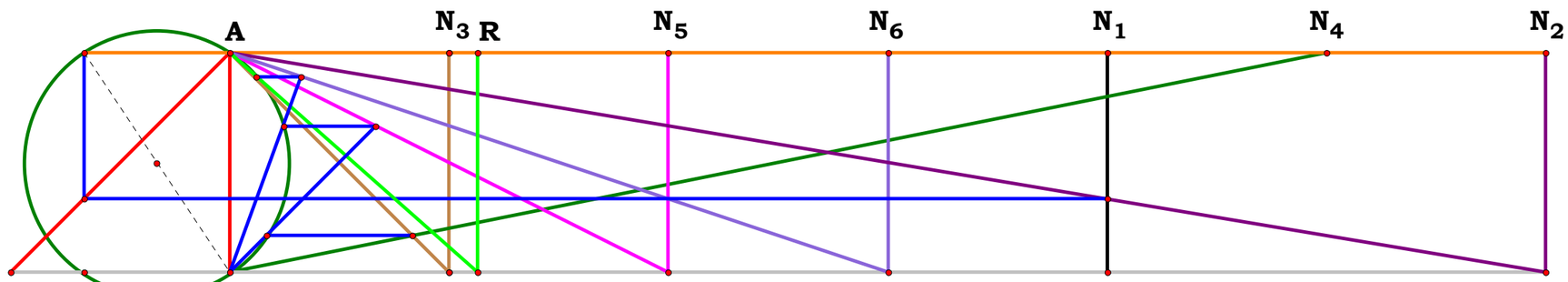
$$BG := \frac{AB \cdot N_6}{AU + N_6}$$

$$AG := AB - BG$$

$$EF := AG + \frac{ET - AB}{2} \qquad FH := \sqrt{EF \cdot (ET - EF)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{AG}$$

$R = 1.132161$



$N_1 = 4.00000$
$N_2 = 6.00000$
$N_3 = 1.00000$
$N_4 = 5.00000$
$N_5 = 2.00000$
$N_6 = 3.00000$
$R = 1.12898$

$AB = 1.00000$
$AC = 0.66667$
$BQ = 0.16667$
$ET = 1.20185$
$EP = 0.93426$
$PS = 0.50000$
$QS = 0.16667$

$AV = 1.00000$
$BM = 0.66667$
$KT = 0.76759$
$KN = 0.57735$
$MN = 0.24402$
$AU = 0.36603$
$BG = 0.89126$

$AG = 0.10874$
$EF = 0.20967$
$FH = 0.45610$
$GH = 0.12277$
$R - \frac{GH \cdot AB}{AG} = 0.00000$

Definitions.

4RST3AB5R5

Unit.

$AB := 1$

Given.

$N_1 := 1.88613$

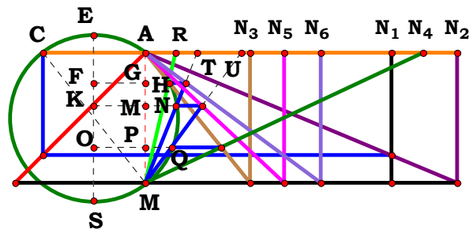
$N_2 := 2.38980$

$N_3 := .80606$

$N_4 := 2.13064$

$N_5 := 1.06544$

$N_6 := 1.34632$



$N_1 = 1.88613$ $N_5 = 1.06544$

$N_2 = 2.38980$ $N_6 = 1.34632$

$N_3 = 0.80606$ $R = 0.23489$

$N_4 = 2.13064$

Descriptions.

$AC := \frac{N_1}{N_2}$ $BP := \frac{AB \cdot N_3}{N_3 + N_4}$

$ES := \sqrt{AB^2 + AC^2}$ $OS := BP + \frac{ES - AB}{2}$

$OQ := \sqrt{OS \cdot (ES - OS)}$ $PQ := OQ - \frac{AC}{2}$

$AU := \frac{PQ \cdot AB}{BP}$

$BM := \frac{AB \cdot N_5}{N_5 + AU}$

$KS := BM + \frac{ES - AB}{2}$

$KN := \sqrt{KS \cdot (ES - KS)}$

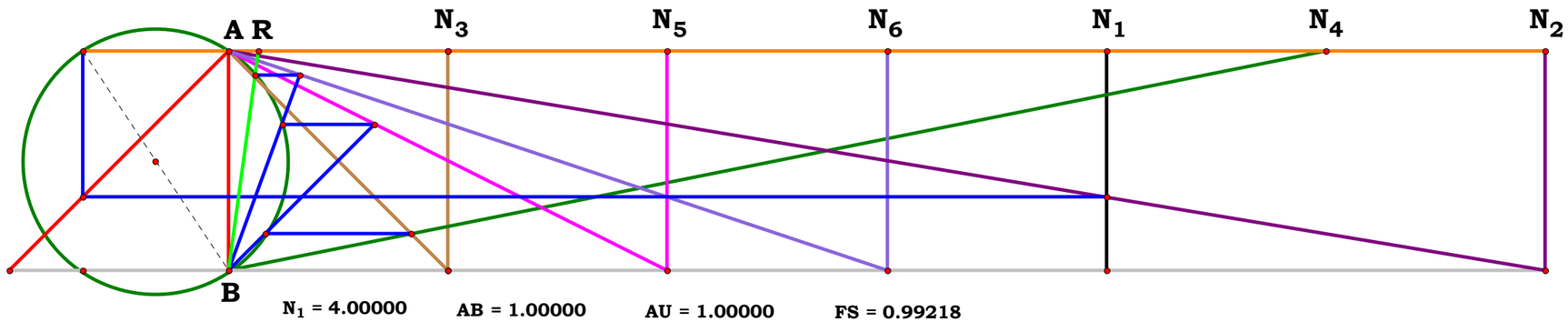
$MN := KN - \frac{AC}{2}$

$AT := \frac{MN \cdot AB}{BM}$

$BG := \frac{N_6 \cdot AB}{N_6 + AT}$ $FS := BG + \frac{ES - AB}{2}$

$FH := \sqrt{FS \cdot (ES - FS)}$ $GH := FH - \frac{AC}{2}$

$R := \frac{GH \cdot AB}{BG}$ $R = 0.234891$



$N_1 = 4.00000$ $AB = 1.00000$ $AU = 1.00000$ $FS = 0.99218$

$N_2 = 6.00000$ $AC = 0.66667$ $BM = 0.66667$ $FH = 0.45610$

$N_3 = 1.00000$ $BP = 0.16667$ $KS = 0.76759$ $GH = 0.12277$

$N_4 = 5.00000$ $ES = 1.20185$ $KN = 0.57735$ $R - \frac{GH \cdot AB}{BG} = 0.00000$

$N_5 = 2.00000$ $OS = 0.26759$ $MN = 0.24402$

$N_6 = 3.00000$ $OQ = 0.50000$ $AT = 0.36603$

$R = 0.13775$ $PQ = 0.16667$ $BG = 0.89126$

Definitions.

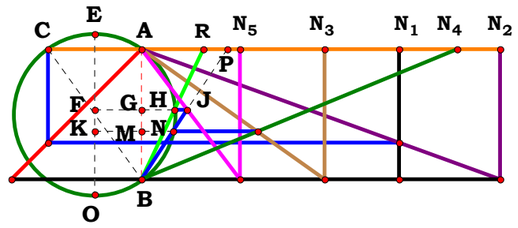
4RST3AB5R6

Unit.

$AB := 1$

Given.

$N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := 1.40657$ $N_4 := 2.42122$ $N_5 := .75549$



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 1.40657$
$N_4 = 2.42122$
$N_5 = 0.75549$
$R = 0.47844$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad BM := \frac{N_3 \cdot AB}{N_3 + N_4}$$

$$EO := \sqrt{AB^2 + AC^2} \qquad KO := BM + \frac{EO - AB}{2}$$

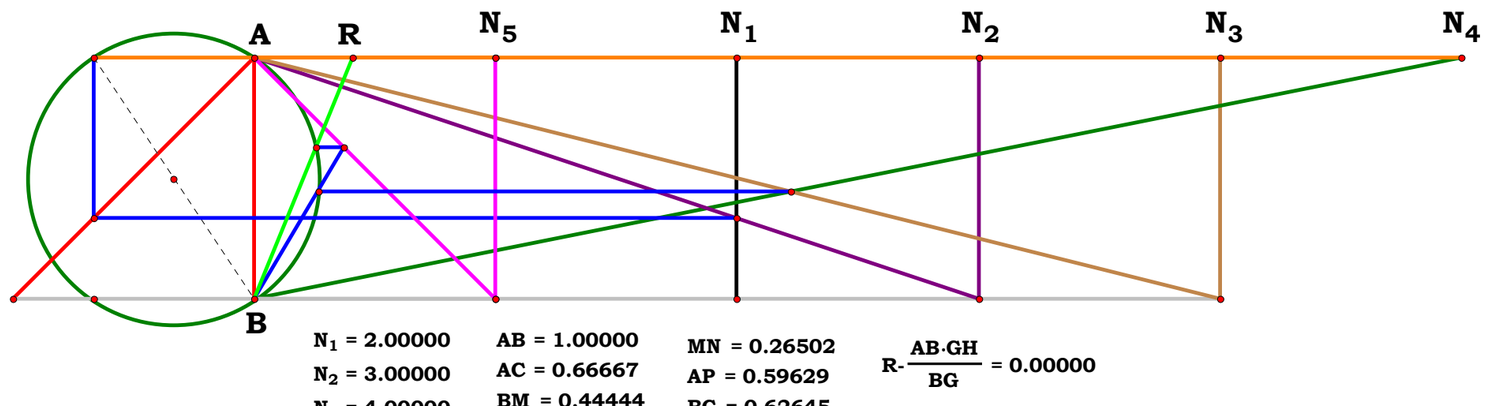
$$KN := \sqrt{KO \cdot (EO - KO)} \qquad MN := KN - \frac{AC}{2}$$

$$AP := \frac{MN \cdot AB}{BM} \qquad BG := \frac{N_5 \cdot AB}{AP + N_5}$$

$$FO := BG + \frac{EO - AB}{2} \qquad FH := \sqrt{FO \cdot (EO - FO)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{BG}$$

$R = 0.47844$



$N_1 = 2.00000$
$N_2 = 3.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 1.00000$
$R = 0.40568$

$AB = 1.00000$
$AC = 0.66667$
$BM = 0.44444$
$EO = 1.20185$
$KO = 0.54537$
$KN = 0.59835$

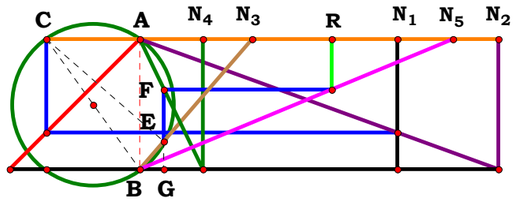
$MN = 0.26502$
$AP = 0.59629$
$BG = 0.62645$
$FO = 0.72738$
$FH = 0.58747$
$GH = 0.25414$

$AB \cdot GH$

$R - \frac{AB \cdot GH}{BG} = 0.00000$

Definitions.

4RST3B5R7



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 0.86417$
$N_4 = 0.48406$
$N_5 = 2.40207$
R = 1.47045

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := .86417$

$N_4 := .48406$ $N_5 := 2.40207$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot C \cdot N_u \cdot (C - D) + N_u^2 \cdot (B \cdot D + A \cdot N_u)}{A \cdot E \cdot (C^2 + N_u^2)} = 1.470443$$

$$Num := \frac{A \cdot C \cdot N_u \cdot (C - D) + N_u^2 \cdot (B \cdot D + A \cdot N_u)}{\sqrt{\left[A \cdot C \cdot N_u \cdot (C - D) + N_u^2 \cdot (B \cdot D + A \cdot N_u)\right]^2}}$$

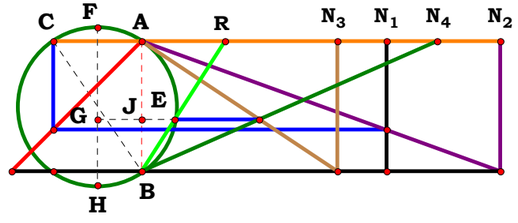
$$Den := \frac{A \cdot E \cdot (C^2 + N_u^2)}{\sqrt{\left[A \cdot E \cdot (C^2 + N_u^2)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 Den = 1 L = 1

$$L - \frac{\left[N_u^2 \cdot (B \cdot D + A \cdot N_u) + A \cdot C \cdot N_u \cdot (C - D)\right] \cdot \sqrt{A^2 \cdot E^2 \cdot (C^2 + N_u^2)^2}}{A \cdot E \cdot (C^2 + N_u^2) \cdot \sqrt{\left[N_u^2 \cdot (B \cdot D + A \cdot N_u) + A \cdot C \cdot N_u \cdot (C - D)\right]^2}} = 0$$

4RST3B5R8



$N_1 = 1.87645$
$N_2 = 2.74817$
$N_3 = 1.50343$
$N_4 = 2.26624$
$R = 0.64069$

Unit. $AB := 1$ Given. $N_1 := 1.87645$ $N_2 := 2.74817$ $N_3 := 1.50343$

$N_4 := 2.26624$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{4\cdot A^2\cdot C\cdot D + B^2\cdot C^2 + 2\cdot B^2\cdot C\cdot D + B^2\cdot D^2} - B\cdot(C+D)}{2\cdot A\cdot D} = 0.640693$$

$$Num := \frac{\sqrt{4\cdot A^2\cdot C\cdot D + B^2\cdot C^2 + 2\cdot B^2\cdot C\cdot D + B^2\cdot D^2} - B\cdot(C+D)}{\sqrt{\left[\sqrt{4\cdot A^2\cdot C\cdot D + B^2\cdot C^2 + 2\cdot B^2\cdot C\cdot D + B^2\cdot D^2} - B\cdot(C+D)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot D}{\sqrt{(2\cdot A\cdot D)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{4\cdot A^2\cdot C\cdot D + B^2\cdot C^2 + 2\cdot B^2\cdot C\cdot D + B^2\cdot D^2} - B\cdot(C+D)\right]\cdot\sqrt{A^2\cdot D^2}}{A\cdot D\cdot\sqrt{\left[\sqrt{4\cdot A^2\cdot C\cdot D + B^2\cdot C^2 + 2\cdot B^2\cdot C\cdot D + B^2\cdot D^2} - B\cdot(C+D)\right]^2}} = 0$$

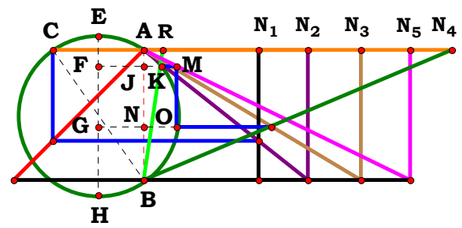
4RST3AB5R9

Unit.

$AB := 1$

Given.

$N_1 := .87881$ $N_2 := 1.25656$ $N_3 := 1.66809$ $N_4 := 2.36310$ $N_5 := 2.04370$



$N_1 = 0.87881$
$N_2 = 1.25656$
$N_3 = 1.66809$
$N_4 = 2.36310$
$N_5 = 2.04370$
$R = 0.14984$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EH := \sqrt{AB^2 + AC^2}$

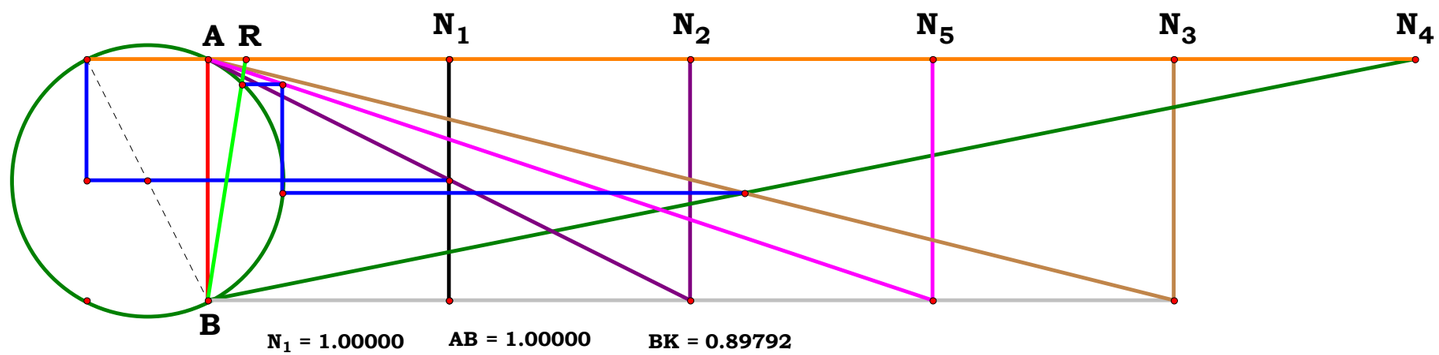
$BN := \frac{AB \cdot N_3}{N_3 + N_4}$ $GH := BN + \frac{EH - AB}{2}$

$GO := \sqrt{GH \cdot (EH - GH)}$ $NO := GO - \frac{AC}{2}$

$BK := \frac{AB \cdot (N_5 - NO)}{N_5}$ $FH := BK + \frac{EH - AB}{2}$

$FK := \sqrt{FH \cdot (EH - FH)}$ $JK := FK - \frac{AC}{2}$

$R := \frac{JK \cdot AB}{BK}$ $R = 0.149838$

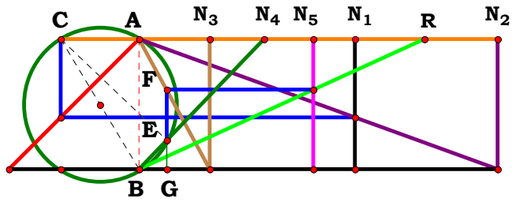


$N_1 = 1.00000$
$N_2 = 2.00000$
$N_3 = 4.00000$
$N_4 = 5.00000$
$N_5 = 3.00000$
$R = 0.15885$

$AB = 1.00000$
$AC = 0.50000$
$EH = 1.11803$
$BN = 0.44444$
$GH = 0.50346$
$GO = 0.55625$
$NO = 0.30625$

$BK = 0.89792$
$FH = 0.95693$
$FK = 0.39263$
$JK = 0.14263$
$R - \frac{AB \cdot JK}{BK} = 0.00000$

4RST3B5R10



$N_1 = 1.65368$
$N_2 = 2.74817$
$N_3 = 0.54454$
$N_4 = 0.95866$
$N_5 = 1.33664$
$R = 2.18469$

Unit. $AB := 1$ Given. $N_1 := 1.65368$ $N_2 := 2.74817$ $N_3 := .54454$

$N_4 := .95866$ $N_5 := 1.33664$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{E \cdot \left[A \cdot D \cdot (D - C) + N_u \cdot \left(B \cdot C + A \cdot N_u\right)\right]} = 2.184699$$

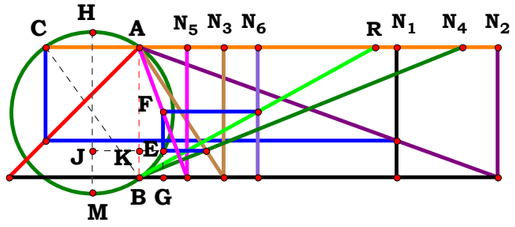
$$Num := \frac{A \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(D^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{E \cdot \left[A \cdot D \cdot (D - C) + N_u \cdot \left(B \cdot C + A \cdot N_u\right)\right]}{\sqrt{\left[E \cdot \left[A \cdot D \cdot (D - C) + N_u \cdot \left(B \cdot C + A \cdot N_u\right)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{E^2 \cdot \left[N_u \cdot \left(B \cdot C + A \cdot N_u\right) - A \cdot D \cdot (C - D)\right]^2 \cdot \left(D^2 + N_u{}^2\right)}}{E \cdot \left[N_u \cdot \left(B \cdot C + A \cdot N_u\right) - A \cdot D \cdot (C - D)\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2}} = 0$$



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 0.65108$
$N_4 = 2.47933$
$N_5 = 0.36806$
$N_6 = 0.91046$
$R = 1.80932$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := .65108$

$N_4 := 2.47933$ $N_5 := .36806$ $N_6 := .91046$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2\cdot A\cdot N_u^{\,2}\cdot (C+D)}{F\cdot\left[B\cdot E\cdot (C+D)+2\cdot A\cdot N_u\cdot (C+D)-E\cdot\sqrt{B^2\cdot C^2+B^2\cdot D^2+2\cdot C\cdot D\cdot\left(2\cdot A^2+B^2\right)}\right]} = 1.809309$$

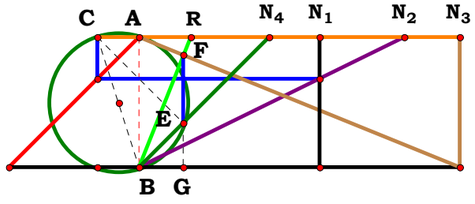
$$Num := \frac{2\cdot A\cdot N_u^{\,2}\cdot (C+D)}{\sqrt{\left[2\cdot A\cdot N_u^{\,2}\cdot (C+D)\right]^2}}$$

$$Den := \frac{F\cdot\left[B\cdot E\cdot (C+D)+2\cdot A\cdot N_u\cdot (C+D)-E\cdot\sqrt{B^2\cdot C^2+B^2\cdot D^2+2\cdot C\cdot D\cdot\left(2\cdot A^2+B^2\right)}\right]}{\sqrt{\left[F\cdot\left[B\cdot E\cdot (C+D)+2\cdot A\cdot N_u\cdot (C+D)-E\cdot\sqrt{B^2\cdot C^2+B^2\cdot D^2+2\cdot C\cdot D\cdot\left(2\cdot A^2+B^2\right)}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A\cdot N_u^{\,2}\cdot\sqrt{F^2\cdot\left[B\cdot E\cdot (C+D)-E\cdot\sqrt{B^2\cdot C^2+B^2\cdot D^2+2\cdot C\cdot D\cdot\left(2\cdot A^2+B^2\right)}+2\cdot A\cdot N_u\cdot (C+D)\right]^2}\cdot (C+D)}{F\cdot\left[B\cdot E\cdot (C+D)-E\cdot\sqrt{B^2\cdot C^2+B^2\cdot D^2+2\cdot C\cdot D\cdot\left(2\cdot A^2+B^2\right)}+2\cdot A\cdot N_u\cdot (C+D)\right]\cdot\sqrt{A^2\cdot N_u^{\,4}\cdot (C+D)^2}} = 0$$



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 2.46232$
$N_4 = 0.99741$
$R = 0.39539$

Unit. $AB := 1$ **Given.** $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := 2.46232$

$N_4 := .99741$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u \cdot (A \cdot D - A \cdot N_u + B \cdot N_u)}{A \cdot (D^2 - C \cdot D + N_u^2) + C \cdot N_u \cdot (A - B)} = 0.39539$$

$$Num := \frac{N_u \cdot (A \cdot D - A \cdot N_u + B \cdot N_u)}{\sqrt{[N_u \cdot (A \cdot D - A \cdot N_u + B \cdot N_u)]^2}}$$

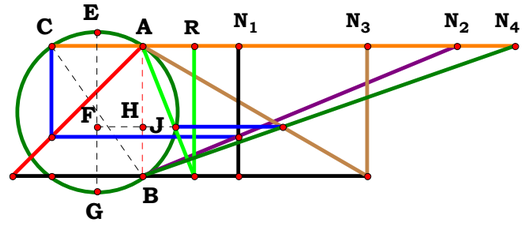
$$Den := \frac{A \cdot (D^2 - C \cdot D + N_u^2) + C \cdot N_u \cdot (A - B)}{\sqrt{[A \cdot (D^2 - C \cdot D + N_u^2) + C \cdot N_u \cdot (A - B)]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{[A \cdot (D^2 - C \cdot D + N_u^2) + C \cdot N_u \cdot (A - B)]^2} \cdot (A \cdot D - A \cdot N_u + B \cdot N_u)}{\sqrt{N_u^2 \cdot (A \cdot D - A \cdot N_u + B \cdot N_u)^2} \cdot [A \cdot (D^2 - C \cdot D + N_u^2) + C \cdot N_u \cdot (A - B)]} = 0$$

4RST3B6R1



$N_1 = 0.73353$
$N_2 = 2.40917$
$N_3 = 1.72621$
$N_4 = 2.85708$
$R = 0.39889$

Unit. $AB := 1$ **Given.** $N_1 := .73353$ $N_2 := 2.40917$ $N_3 := 1.72621$ $N_4 := 2.85708$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}-(C+D)\cdot(A-B)}{2\cdot A\cdot C}=0.398896$$

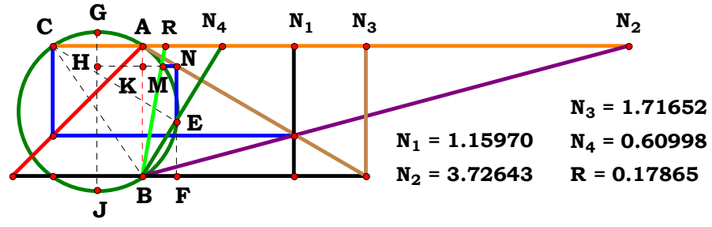
$$Num := \frac{\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}-(C+D)\cdot(A-B)}{\sqrt{\left[\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}-(C+D)\cdot(A-B)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot C}{\sqrt{(2\cdot A\cdot C)^2}} \qquad L := \frac{Num}{Den}$$

Num $= 1$ **Den** $= 1$ **L** $= 1$

$$L-\frac{\sqrt{A^2\cdot C^2}\cdot\left[\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}-(C+D)\cdot(A-B)\right]}{A\cdot C\cdot\sqrt{\left[\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}-(C+D)\cdot(A-B)\right]^2}}=0$$

4RST3B6R2



Unit. $AB := 1$ **Given.** $N_1 := 1.15970$ $N_2 := 3.72643$ $N_3 := 1.71652$

$N_4 := .60998$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{\left(D^2+N_u^2\right)^2\cdot(A-B)^2-4\cdot C^2\cdot\left(A\cdot D-A\cdot N_u+B\cdot N_u\right)^2+4\cdot A\cdot C\cdot\left(D^2+N_u^2\right)\cdot\left(A\cdot D-A\cdot N_u+B\cdot N_u\right)}-\left(D^2+N_u^2\right)\cdot(A-B)}{2\cdot\left[A\cdot\left(D^2-C\cdot D+N_u^2+C\cdot N_u\right)-B\cdot C\cdot N_u\right]}=0.178653$$

$$\text{Num} := \frac{\sqrt{\left(D^2+N_u^2\right)^2\cdot(A-B)^2-4\cdot C^2\cdot\left(A\cdot D-A\cdot N_u+B\cdot N_u\right)^2+4\cdot A\cdot C\cdot\left(D^2+N_u^2\right)\cdot\left(A\cdot D-A\cdot N_u+B\cdot N_u\right)}-\left(D^2+N_u^2\right)\cdot(A-B)}{\sqrt{\left[\sqrt{\left(D^2+N_u^2\right)^2\cdot(A-B)^2-4\cdot C^2\cdot\left(A\cdot D-A\cdot N_u+B\cdot N_u\right)^2+4\cdot A\cdot C\cdot\left(D^2+N_u^2\right)\cdot\left(A\cdot D-A\cdot N_u+B\cdot N_u\right)}-\left(D^2+N_u^2\right)\cdot(A-B)\right]^2}}$$

$$\text{Den} := \frac{2\cdot\left[A\cdot\left(D^2-C\cdot D+N_u^2+C\cdot N_u\right)-B\cdot C\cdot N_u\right]}{\sqrt{\left[2\cdot\left[A\cdot\left(D^2-C\cdot D+N_u^2+C\cdot N_u\right)-B\cdot C\cdot N_u\right]\right]^2}} \qquad L := \frac{\text{Num}}{\text{Den}}$$

$\text{Num} = 1$ $\text{Den} = 1$ $L = 1$

$$L-\frac{\left[\sqrt{\left(D^2+N_u^2\right)^2\cdot(A-B)^2-4\cdot C^2\cdot\left(A\cdot D-A\cdot N_u+B\cdot N_u\right)^2+4\cdot A\cdot C\cdot\left(D^2+N_u^2\right)\cdot\left(A\cdot D-A\cdot N_u+B\cdot N_u\right)}-\left(D^2+N_u^2\right)\cdot(A-B)\right]\cdot\sqrt{\left[2\cdot A\cdot\left(D^2-C\cdot D+N_u^2+C\cdot N_u\right)-2\cdot B\cdot C\cdot N_u\right]^2}}{\sqrt{\left[\sqrt{\left(D^2+N_u^2\right)^2\cdot(A-B)^2-4\cdot C^2\cdot\left(A\cdot D-A\cdot N_u+B\cdot N_u\right)^2+4\cdot A\cdot C\cdot\left(D^2+N_u^2\right)\cdot\left(A\cdot D-A\cdot N_u+B\cdot N_u\right)}-\left(D^2+N_u^2\right)\cdot(A-B)\right]^2}\cdot\left[2\cdot A\cdot\left(D^2-C\cdot D+N_u^2+C\cdot N_u\right)-2\cdot B\cdot C\cdot N_u\right]}=0$$

4RST3AB6R3

Unit.

$AB := 1$

Given.

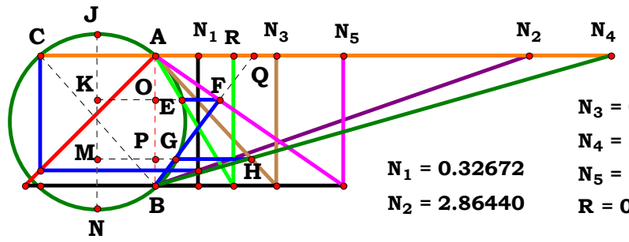
$N_1 := .32672$

$N_2 := 2.86440$

$N_3 := .93197$

$N_4 := 3.49634$

$N_5 := 1.44318$



$N_1 = 0.32672$

$N_2 = 2.86440$

$N_3 = 0.93197$

$N_4 = 3.49634$

$N_5 = 1.44318$

$R = 0.60084$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$JN := \sqrt{AB^2 + AC^2} \qquad JM := JN - \left(BP + \frac{JN - AB}{2}\right)$$

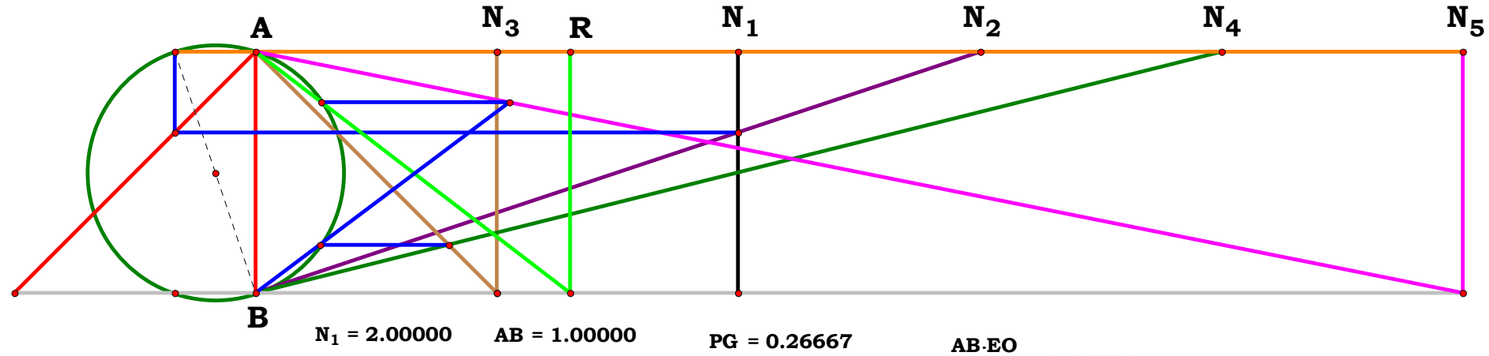
$$GM := \sqrt{JM \cdot (JN - JM)} \qquad PG := GM - \frac{AC}{2}$$

$$AQ := \frac{PG \cdot AB}{BP} \qquad AO := \frac{AB \cdot AQ}{AQ + N_5}$$

$$JK := AO + \frac{JN - AB}{2} \qquad EK := \sqrt{JK \cdot (JN - JK)}$$

$$EO := EK - \frac{AC}{2} \qquad R := \frac{EO \cdot AB}{AO}$$

$R = 0.600839$



$N_1 = 2.00000$

$N_2 = 3.00000$

$N_3 = 1.00000$

$N_4 = 4.00000$

$N_5 = 5.00000$

$R = 1.30040$

$AB = 1.00000$

$AC = 0.33333$

$BP = 0.20000$

$JN = 1.05409$

$JM = 0.82705$

$GM = 0.43333$

$PG = 0.26667$

$AQ = 1.33333$

$AO = 0.21053$

$JK = 0.23757$

$EK = 0.44043$

$EO = 0.27377$

$R - \frac{AB \cdot EO}{AO} = 0.00000$

Definitions.

4RST3AB6R4

Unit.

$AB := 1$

Given.

$N_1 := .54950$

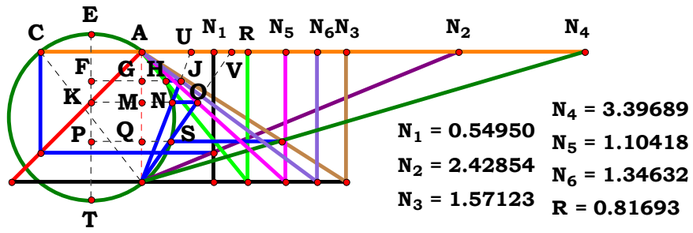
$N_2 := 2.42854$

$N_3 := 1.57123$

$N_4 := 3.39689$

$N_5 := 1.10418$

$N_6 := 1.34632$



$N_1 = 0.54950$
$N_2 = 2.42854$
$N_3 = 1.57123$
$N_4 = 3.39689$
$N_5 = 1.10418$
$N_6 = 1.34632$
$R = 0.81693$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad BQ := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ET := \sqrt{AB^2 + AC^2} \qquad EP := ET - \left(BQ + \frac{ET - AB}{2}\right)$$

$$PS := \sqrt{EP \cdot (ET - EP)} \qquad QS := PS - \frac{AC}{2}$$

$$AV := \frac{QS \cdot AB}{BQ} \qquad BM := \frac{AB \cdot N_5}{AV + N_5}$$

$$KT := BM + \frac{ET - AB}{2}$$

$$KN := \sqrt{KT \cdot (ET - KT)}$$

$$MN := KN - \frac{AC}{2}$$

$$AU := \frac{MN \cdot AB}{BM}$$

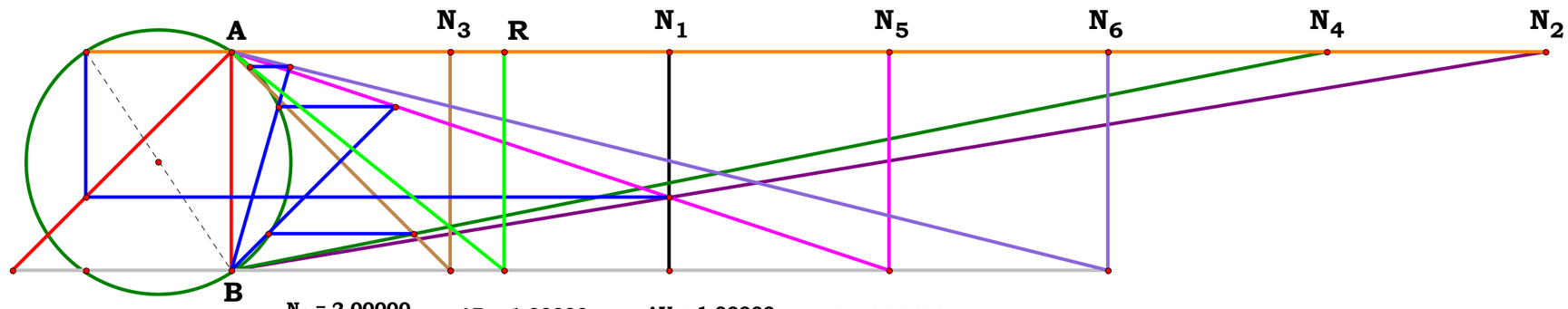
$$BG := \frac{AB \cdot N_6}{AU + N_6}$$

$$AG := AB - BG$$

$$EF := AG + \frac{ET - AB}{2} \qquad FH := \sqrt{EF \cdot (ET - EF)}$$

$$GH := FH - \frac{AC}{2} \qquad R := \frac{GH \cdot AB}{AG}$$

$R = 0.816934$



$N_1 = 2.00000$
$N_2 = 6.00000$
$N_3 = 1.00000$
$N_4 = 5.00000$
$N_5 = 3.00000$
$N_6 = 4.00000$
$R = 1.24604$

$AB = 1.00000$
$AC = 0.66667$
$BQ = 0.16667$
$ET = 1.20185$
$EP = 0.93426$
$PS = 0.50000$
$QS = 0.16667$

$AV = 1.00000$
$BM = 0.75000$
$KT = 0.85093$
$KN = 0.54645$
$MN = 0.21312$
$AU = 0.28416$
$BG = 0.93367$

$AG = 0.06633$
$EF = 0.16725$
$FH = 0.41598$
$GH = 0.08265$
$R - \frac{AB \cdot GH}{AG} = 0.00000$

Definitions.

4RST3AB6R5

Unit.

$AB := 1$

Given.

$N_1 := .66573$

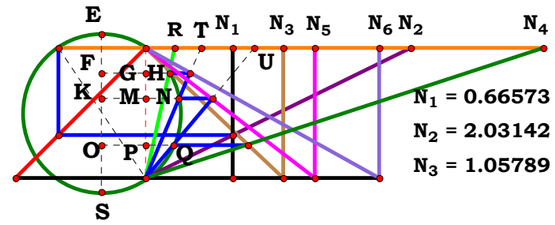
$N_2 := 2.03142$

$N_3 := 1.05789$

$N_4 := 3.05079$

$N_5 := 1.29790$

$N_6 := 1.79187$



$N_4 = 3.05079$

$N_1 = 0.66573$

$N_5 = 1.29790$

$N_2 = 2.03142$

$N_6 = 1.79187$

$N_3 = 1.05789$

$R = 0.22341$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad BP := \frac{AB \cdot N_3}{N_3 + N_4}$$

$$ES := \sqrt{AB^2 + AC^2} \qquad OS := BP + \frac{ES - AB}{2}$$

$$OQ := \sqrt{OS \cdot (ES - OS)} \qquad PQ := OQ - \frac{AC}{2}$$

$$AU := \frac{PQ \cdot AB}{BP} \qquad BM := \frac{AB \cdot N_5}{N_5 + AU}$$

$$KS := BM + \frac{ES - AB}{2}$$

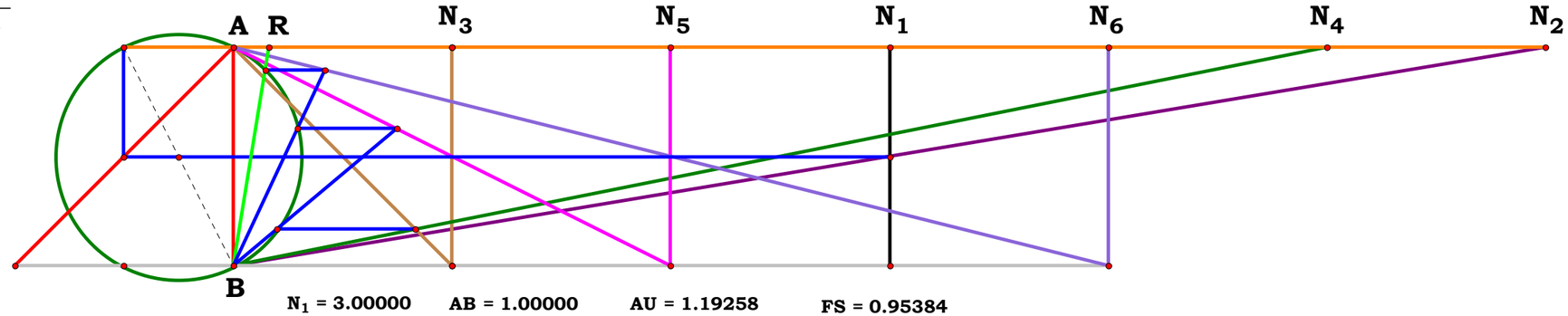
$$KN := \sqrt{KS \cdot (ES - KS)}$$

$$MN := KN - \frac{AC}{2} \qquad AT := \frac{MN \cdot AB}{BM}$$

$$BG := \frac{N_6 \cdot AB}{N_6 + AT} \qquad FS := BG + \frac{ES - AB}{2}$$

$$FH := \sqrt{FS \cdot (ES - FS)} \qquad GH := FH - \frac{AC}{2}$$

$$R := \frac{GH \cdot AB}{BG} \qquad R = 0.223407$$



$N_1 = 3.00000$

$N_2 = 6.00000$

$N_3 = 1.00000$

$N_4 = 5.00000$

$N_5 = 2.00000$

$N_6 = 4.00000$

$R = 0.16288$

$AB = 1.00000$

$AC = 0.50000$

$BP = 0.16667$

$ES = 1.11803$

$OS = 0.22568$

$OQ = 0.44876$

$PQ = 0.19876$

$AU = 1.19258$

$BM = 0.62645$

$KS = 0.68547$

$KN = 0.54453$

$MN = 0.29453$

$AT = 0.47015$

$BG = 0.89482$

$FS = 0.95384$

$FH = 0.39574$

$GH = 0.14574$

$R - \frac{AB \cdot GH}{BG} = 0.00000$

Definitions.

4RST3AB6R6

Unit.

$AB := 1$

Given.

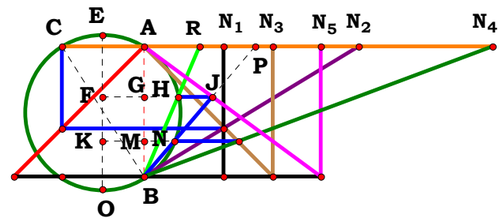
$N_1 := .60761$

$N_2 := 1.64399$

$N_3 := .99009$

$N_4 := 2.67305$

$N_5 := 1.35601$



$N_1 = 0.60761$

$N_2 = 1.64399$

$N_3 = 0.99009$

$N_4 = 2.67305$

$N_5 = 1.35601$

$R = 0.43013$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad BM := \frac{N_3 \cdot AB}{N_3 + N_4}$$

$$EO := \sqrt{AB^2 + AC^2} \qquad KO := BM + \frac{EO - AB}{2}$$

$$KN := \sqrt{KO \cdot (EO - KO)} \qquad MN := KN - \frac{AC}{2}$$

$$AP := \frac{MN \cdot AB}{BM} \qquad BG := \frac{N_5 \cdot AB}{AP + N_5}$$

$$FO := BG + \frac{EO - AB}{2}$$

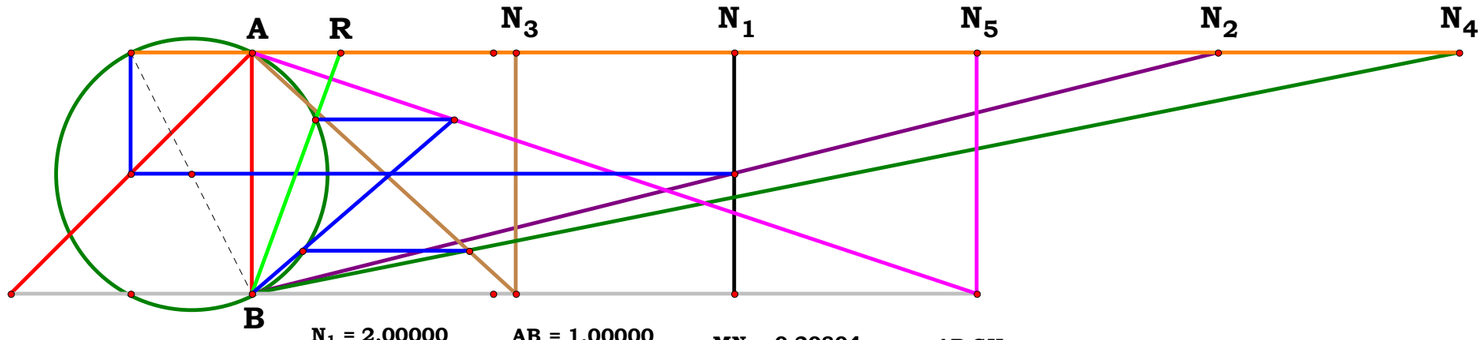
$$FH := \sqrt{FO \cdot (EO - FO)}$$

$$GH := FH - \frac{AC}{2}$$

$$R := \frac{GH \cdot AB}{BG}$$

$R = 0.430132$

Definitions.



$N_1 = 2.00000$

$N_2 = 4.00000$

$N_3 = 1.09412$

$N_4 = 5.00000$

$N_5 = 3.00000$

$R = 0.36503$

$AB = 1.00000$

$AC = 0.50000$

$BM = 0.17954$

$EO = 1.11803$

$KO = 0.23855$

$KN = 0.45804$

$MN = 0.20804$

$AP = 1.15878$

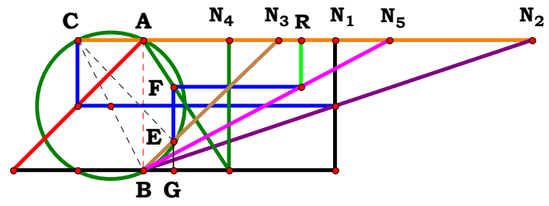
$BG = 0.72137$

$FO = 0.78038$

$FH = 0.51332$

$GH = 0.26332$

$R - \frac{AB \cdot GH}{BG} = 0.00000$



$N_1 = 1.46965$
$N_2 = 2.98063$
$N_3 = 1.03851$
$N_4 = 0.65840$
$N_5 = 1.88873$
$R = 1.21000$

Unit. $AB := 1$ Given. $N_1 := 1.46965$ $N_2 := 2.98063$ $N_3 := 1.03851$

$N_4 := .65840$ $N_5 := 1.88873$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot C \cdot N_u \cdot (C - D) + N_u \cdot \left[N_u \cdot \left[D \cdot (A - B) + A \cdot N_u \right] \right]}{A \cdot E \cdot \left(C^2 + {N_u}^2 \right)} = 1.209993$$

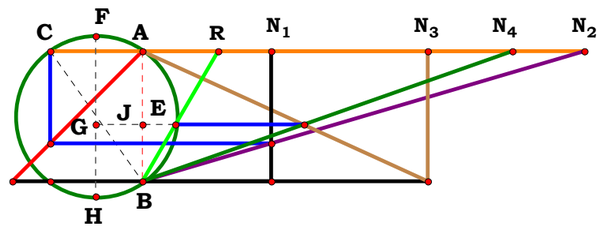
$$Num := \frac{A \cdot C \cdot N_u \cdot (C - D) + N_u \cdot \left[N_u \cdot \left[D \cdot (A - B) + A \cdot N_u \right] \right]}{\sqrt{\left[A \cdot C \cdot N_u \cdot (C - D) + N_u \cdot \left[N_u \cdot \left[D \cdot (A - B) + A \cdot N_u \right] \right] \right]^2}}$$

$$Den := \frac{A \cdot E \cdot \left(C^2 + {N_u}^2 \right)}{\sqrt{\left[A \cdot E \cdot \left(C^2 + {N_u}^2 \right) \right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[{N_u}^2 \cdot \left[A \cdot N_u + D \cdot (A - B) \right] + A \cdot C \cdot N_u \cdot (C - D) \right] \cdot \sqrt{A^2 \cdot E^2 \cdot \left(C^2 + {N_u}^2 \right)^2}}{A \cdot E \cdot \left(C^2 + {N_u}^2 \right) \cdot \sqrt{\left[{N_u}^2 \cdot \left[A \cdot N_u + D \cdot (A - B) \right] + A \cdot C \cdot N_u \cdot (C - D) \right]^2}} = 0$$



$N_1 = 0.98536$

$N_2 = 3.38743$

$N_3 = 2.19112$

$N_4 = 2.83771$

$R = 0.58528$

Unit. $AB := 1$ **Given.** $N_1 := .98536$ $N_2 := 3.38743$ $N_3 := 2.19112$ $N_4 := 2.83771$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4}$$

Descriptions.

$$\frac{\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}-A\cdot(C+D)+B\cdot(C+D)}{2\cdot A\cdot D} = 0.585284$$

$$Num := \frac{\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}-A\cdot(C+D)+B\cdot(C+D)}{\sqrt{\left[\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}-A\cdot(C+D)+B\cdot(C+D)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot D}{\sqrt{(2\cdot A\cdot D)^2}} \qquad L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{\sqrt{A^2\cdot D^2}\cdot\left[B\cdot(C+D)-A\cdot(C+D)+\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}\right]}{A\cdot D\cdot\sqrt{\left[B\cdot(C+D)-A\cdot(C+D)+\sqrt{\left(C^2+D^2\right)\cdot(A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}\right]^2}} = 0$$

4RST3AB6R9

Unit.

$AB := 1$

Given.

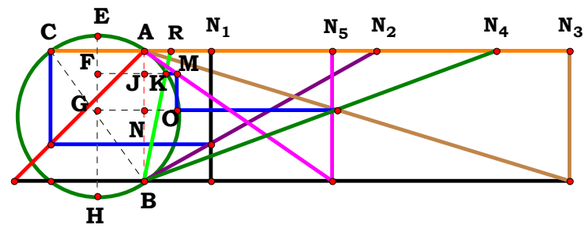
$N_1 := .51075$

$N_2 := 1.77959$

$N_3 := 3.26624$

$N_4 := 2.70210$

$N_5 := 1.44318$



$N_1 = 0.51075$

$N_2 = 1.77959$

$N_3 = 3.26624$

$N_4 = 2.70210$

$N_5 = 1.44318$

$R = 0.20164$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

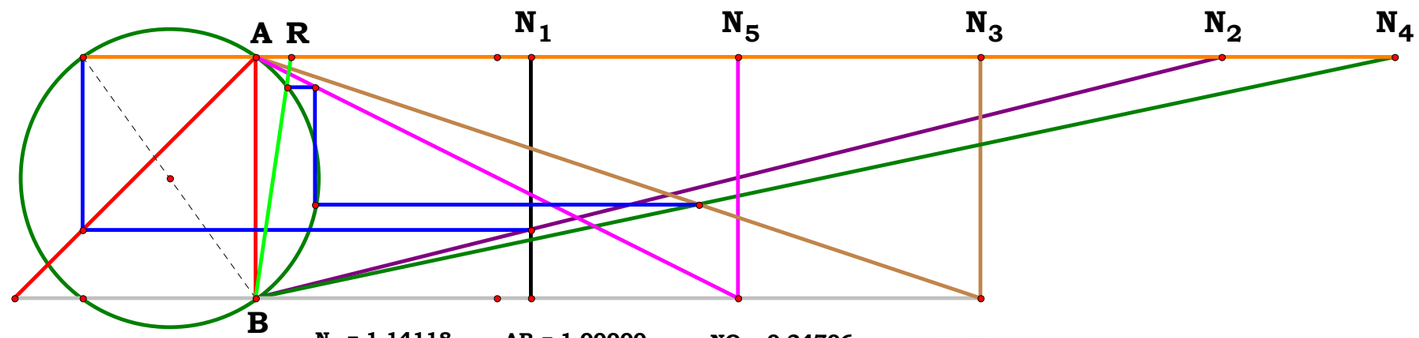
$$BN := \frac{AB \cdot N_3}{N_3 + N_4} \qquad GH := BN + \frac{EH - AB}{2}$$

$$GO := \sqrt{GH \cdot (EH - GH)} \qquad NO := GO - \frac{AC}{2}$$

$$BK := \frac{AB \cdot (N_5 - NO)}{N_5} \qquad FH := BK + \frac{EH - AB}{2}$$

$$FK := \sqrt{FH \cdot (EH - FH)} \qquad JK := FK - \frac{AC}{2}$$

$$R := \frac{JK \cdot AB}{BK} \qquad R = 0.201637$$



$N_1 = 1.14118$

$N_2 = 4.00000$

$N_3 = 3.00000$

$N_4 = 4.71764$

$N_5 = 2.00000$

$R = 0.14652$

$AB = 1.00000$

$AC = 0.71470$

$EH = 1.22915$

$BN = 0.38872$

$GH = 0.50329$

$GO = 0.60441$

$NO = 0.24706$

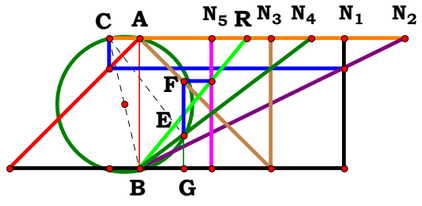
$BK = 0.87647$

$FH = 0.99104$

$FK = 0.48577$

$JK = 0.12842$

$R - \frac{AB \cdot JK}{BK} = 0.00000$



$N_1 = 1.56650$
$N_2 = 2.03142$
$N_3 = 1.00946$
$N_4 = 1.31704$
$N_5 = 0.55209$
$R = 0.82809$

Unit. $AB := 1$ Given. $N_1 := 1.56650$ $N_2 := 2.03142$ $N_3 := 1.00946$

$N_4 := 1.31740$ $N_5 := .55209$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{E \cdot \left(A \cdot D^2 + A \cdot N_u{}^2 - A \cdot C \cdot D + A \cdot C \cdot N_u - B \cdot C \cdot N_u\right)} = 0.82801$$

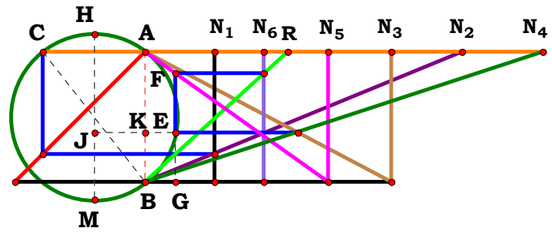
$$Num := \frac{A \cdot N_u \cdot \left(D^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(D^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{E \cdot \left(A \cdot D^2 + A \cdot N_u{}^2 - A \cdot C \cdot D + A \cdot C \cdot N_u - B \cdot C \cdot N_u\right)}{\sqrt{\left[E \cdot \left(A \cdot D^2 + A \cdot N_u{}^2 - A \cdot C \cdot D + A \cdot C \cdot N_u - B \cdot C \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{E^2 \cdot \left(A \cdot D^2 + A \cdot N_u{}^2 - A \cdot C \cdot D + A \cdot C \cdot N_u - B \cdot C \cdot N_u\right)^2} \cdot \left(D^2 + N_u{}^2\right)}{E \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(D^2 + N_u{}^2\right)^2} \cdot \left(A \cdot D^2 + A \cdot N_u{}^2 - A \cdot C \cdot D + A \cdot C \cdot N_u - B \cdot C \cdot N_u\right)} = 0$$



$N_1 = 0.53013$
$N_2 = 2.42854$
$N_3 = 1.89086$
$N_4 = 3.05079$
$N_5 = 1.40444$
$N_6 = 0.91046$
$R = 1.09141$

Unit. $AB := 1$ Given. $N_1 := .53013$ $N_2 := 2.42854$ $N_3 := 1.89086$

$N_4 := 3.05079$ $N_5 := 1.40444$ $N_6 := .91046$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2\cdot A\cdot N_6\cdot N_u\cdot (C+D)}{(C+D)\cdot\left[E\cdot (A-B)+2\cdot A\cdot N_u\right]-E\cdot\sqrt{\left(C^2+D^2\right)\cdot (A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}} = 1.091401$$

$$Num := \frac{2\cdot A\cdot N_6\cdot N_u\cdot (C+D)}{\sqrt{\left[2\cdot A\cdot N_6\cdot N_u\cdot (C+D)\right]^2}}$$

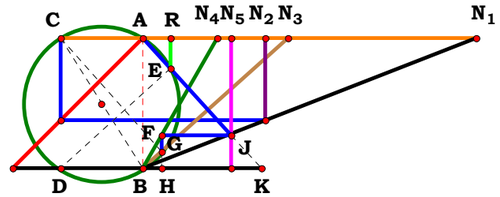
$$Den := \frac{(C+D)\cdot\left[E\cdot (A-B)+2\cdot A\cdot N_u\right]-E\cdot\sqrt{\left(C^2+D^2\right)\cdot (A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}}{\sqrt{\left[(C+D)\cdot\left[E\cdot (A-B)+2\cdot A\cdot N_u\right]-E\cdot\sqrt{\left(C^2+D^2\right)\cdot (A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A\cdot N_6\cdot N_u\cdot\sqrt{\left[\left[2\cdot A\cdot N_u+E\cdot (A-B)\right]\cdot (C+D)-E\cdot\sqrt{\left(C^2+D^2\right)\cdot (A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}\right]^2}\cdot (C+D)}{\left[\left[2\cdot A\cdot N_u+E\cdot (A-B)\right]\cdot (C+D)-E\cdot\sqrt{\left(C^2+D^2\right)\cdot (A-B)^2+2\cdot C\cdot D\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}\right]\cdot\sqrt{A^2\cdot N_6{}^2\cdot N_u{}^2\cdot (C+D)^2}} = 0$$

4RST4B1R0



$N_1 = 2.55445$
$N_2 = 0.93693$
$N_3 = 1.11600$
$N_4 = 0.57123$
$N_5 = 0.67800$
$R = 0.21085$

Unit. $AB := 1$ Given. $N_1 := 2.55445$ $N_2 := .93693$ $N_3 := 1.11600$ $N_4 := .57123$ $N_5 := .67800$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{E \cdot B \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[\left[N_u \cdot (B - A) - B \cdot C\right] \cdot D + B \cdot \left(C^2 + N_u^2\right)\right] + B \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A - B)}{\left[D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] - \left[B \cdot \left(C^2 + N_u^2\right)\right]\right]^2 \cdot E^2 + B^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2} = 0.210851$$

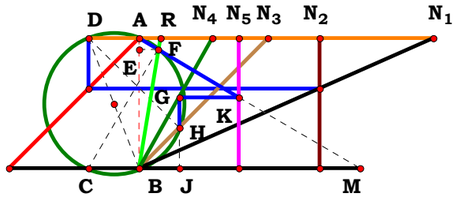
$$Num := \frac{B \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[\left[N_u \cdot (B - A) - B \cdot C\right] \cdot D + B \cdot \left(C^2 + N_u^2\right)\right] + B \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A - B)}{\sqrt{\left[B \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[\left[N_u \cdot (B - A) - B \cdot C\right] \cdot D + B \cdot \left(C^2 + N_u^2\right)\right] + B \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A - B)\right]^2}}$$

$$Den := \frac{\left[D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] - \left[B \cdot \left(C^2 + N_u^2\right)\right]\right]^2 \cdot E^2 + B^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2}{\sqrt{\left[\left[D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] - \left[B \cdot \left(C^2 + N_u^2\right)\right]\right]^2 \cdot E^2 + B^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = -1$ $Den = 1$ $L = -1$

$$L - \frac{\left[B \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[B \cdot \left(C^2 + N_u^2\right) - D \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right] + B \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A - B)\right] \cdot \sqrt{\left[E^2 \cdot \left[B \cdot \left(C^2 + N_u^2\right) - D \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]^2 + B^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right]^2}}{\left[E^2 \cdot \left[B \cdot \left(C^2 + N_u^2\right) - D \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]^2 + B^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right] \cdot \sqrt{\left[B \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[B \cdot \left(C^2 + N_u^2\right) - D \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right] + B \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A - B)\right]^2}} = 0$$

4RST4B1R2



$N_1 = 2.25419$
$N_2 = 1.38247$
$N_3 = 0.99009$
$N_4 = 0.56155$
$N_5 = 0.76518$
$R = 0.16461$

Unit. $AB := 1$ Given. $N_1 := 2.25419$ $N_2 := 1.38247$ $N_3 := .99009$ $N_4 := .56155$ $N_5 := .76518$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{E\cdot\left[B\cdot\left(B\cdot C^2+B\cdot N_u{}^2-B\cdot C\cdot D-A\cdot D\cdot N_u+B\cdot D\cdot N_u\right)\right]+B\cdot N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A-B)}{B^2\cdot N_u{}^3+E\cdot\left[(A-B)\cdot\left(B\cdot C\cdot D-B\cdot N_u{}^2-B\cdot C^2+A\cdot D\cdot N_u-B\cdot D\cdot N_u\right)\right]+B^2\cdot C^2\cdot N_u}=0.164617$$

$$Num := \frac{E\cdot\left[B\cdot\left(B\cdot C^2+B\cdot N_u{}^2-B\cdot C\cdot D-A\cdot D\cdot N_u+B\cdot D\cdot N_u\right)\right]+B\cdot N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A-B)}{\sqrt{\left[E\cdot\left[B\cdot\left(B\cdot C^2+B\cdot N_u{}^2-B\cdot C\cdot D-A\cdot D\cdot N_u+B\cdot D\cdot N_u\right)\right]+B\cdot N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A-B)\right]^2}}$$

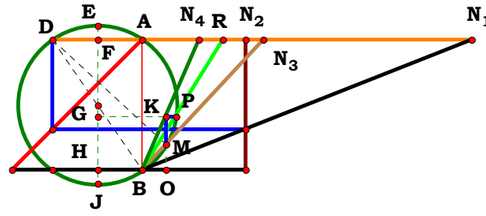
$$Den := \frac{B^2\cdot N_u{}^3+E\cdot\left[(A-B)\cdot\left(B\cdot C\cdot D-B\cdot N_u{}^2-B\cdot C^2+A\cdot D\cdot N_u-B\cdot D\cdot N_u\right)\right]+B^2\cdot C^2\cdot N_u}{\sqrt{\left[B^2\cdot N_u{}^3+E\cdot\left[(A-B)\cdot\left(B\cdot C\cdot D-B\cdot N_u{}^2-B\cdot C^2+A\cdot D\cdot N_u-B\cdot D\cdot N_u\right)\right]+B^2\cdot C^2\cdot N_u\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[B\cdot E\cdot\left(B\cdot C^2+B\cdot N_u{}^2-B\cdot C\cdot D-A\cdot D\cdot N_u+B\cdot D\cdot N_u\right)+B\cdot N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A-B)\right]\cdot\sqrt{\left[B^2\cdot N_u{}^3-E\cdot(A-B)\cdot\left(B\cdot C^2+B\cdot N_u{}^2-B\cdot C\cdot D-A\cdot D\cdot N_u+B\cdot D\cdot N_u\right)+B^2\cdot C^2\cdot N_u\right]^2}}{\sqrt{\left[B\cdot E\cdot\left(B\cdot C^2+B\cdot N_u{}^2-B\cdot C\cdot D-A\cdot D\cdot N_u+B\cdot D\cdot N_u\right)+B\cdot N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A-B)\right]^2\cdot\left[B^2\cdot N_u{}^3-E\cdot(A-B)\cdot\left(B\cdot C^2+B\cdot N_u{}^2-B\cdot C\cdot D-A\cdot D\cdot N_u+B\cdot D\cdot N_u\right)+B^2\cdot C^2\cdot N_u\right]}}=0$$

4RST4B1R4



$N_1 = 2.52540$
$N_2 = 0.79164$
$N_3 = 0.93197$
$N_4 = 0.43563$
$R = 0.62289$

Unit. $AB := 1$ Given. $N_1 := 2.52540$ $N_2 := .79164$ $N_3 := .93197$

$N_4 := .43563$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{\left(C^2 + N_u{}^2\right)^2 \cdot (A-B)^2 + 4 \cdot D \cdot \left[B \cdot C + N_u \cdot (A-B)\right] \cdot \left[N_u \cdot \left[B \cdot N_u - D \cdot (A-B)\right] + B \cdot C \cdot (C-D)\right]} + \left(C^2 + N_u{}^2\right) \cdot (A-B)}{2 \cdot D \cdot \left[B \cdot C + N_u \cdot (A-B)\right]} = 0.622889$$

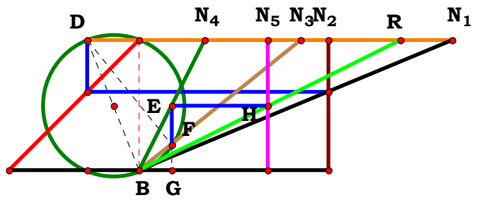
$$Num := \frac{\sqrt{\left(C^2 + N_u{}^2\right)^2 \cdot (A-B)^2 + 4 \cdot D \cdot \left[B \cdot C + N_u \cdot (A-B)\right] \cdot \left[N_u \cdot \left[B \cdot N_u - D \cdot (A-B)\right] + B \cdot C \cdot (C-D)\right]} + \left(C^2 + N_u{}^2\right) \cdot (A-B)}{\sqrt{\left[\sqrt{\left(C^2 + N_u{}^2\right)^2 \cdot (A-B)^2 + 4 \cdot D \cdot \left[B \cdot C + N_u \cdot (A-B)\right] \cdot \left[N_u \cdot \left[B \cdot N_u - D \cdot (A-B)\right] + B \cdot C \cdot (C-D)\right]} + \left(C^2 + N_u{}^2\right) \cdot (A-B)\right]^2}}$$

$$Den := \frac{2 \cdot D \cdot \left[B \cdot C + N_u \cdot (A-B)\right]}{\sqrt{\left[2 \cdot D \cdot \left[B \cdot C + N_u \cdot (A-B)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{D^2 \cdot \left[B \cdot C + N_u \cdot (A-B)\right]^2} \cdot \left[\left(C^2 + N_u{}^2\right) \cdot (A-B) + \sqrt{\left(C^2 + N_u{}^2\right)^2 \cdot (A-B)^2 + 4 \cdot D \cdot \left[B \cdot C + N_u \cdot (A-B)\right] \cdot \left[N_u \cdot \left[B \cdot N_u - D \cdot (A-B)\right] + B \cdot C \cdot (C-D)\right]}\right]}{D \cdot \left[B \cdot C + N_u \cdot (A-B)\right] \cdot \sqrt{\left[\left(C^2 + N_u{}^2\right) \cdot (A-B) + \sqrt{\left(C^2 + N_u{}^2\right)^2 \cdot (A-B)^2 + 4 \cdot D \cdot \left[B \cdot C + N_u \cdot (A-B)\right] \cdot \left[N_u \cdot \left[B \cdot N_u - D \cdot (A-B)\right] + B \cdot C \cdot (C-D)\right]}\right]^2}} = 0$$

4RST4B1R7



$N_1 = 2.39948$
$N_2 = 1.45027$
$N_3 = 1.24192$
$N_4 = 0.50343$
$N_5 = 0.98795$
$R = 2.00146$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := 1.45027$ $N_3 := 1.24192$

$N_4 := .50343$ $N_5 := .98795$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[B \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]} = 2.001469$$

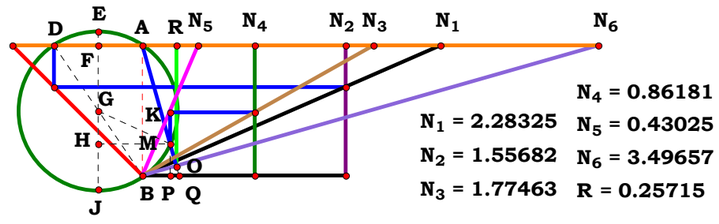
$$Num := \frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{E \cdot \left[B \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[E \cdot \left[B \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \sqrt{E^2 \cdot \left[B \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]^2} \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[B \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right] \cdot \sqrt{B^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 2.28325$ $N_2 := 1.55682$ $N_3 := 1.77463$

$N_4 := .86181$ $N_5 := .43025$ $N_6 := 3.49657$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2 \cdot C \cdot N_u \cdot \sqrt{B}}{\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot (A \cdot D \cdot E + B \cdot C \cdot N_u)} + \sqrt{B} \cdot (2 \cdot C \cdot F + D \cdot E)} = 0.25716$$

$$Num := \frac{2 \cdot C \cdot N_u \cdot \sqrt{B}}{\sqrt{(2 \cdot C \cdot N_u \cdot \sqrt{B})^2}}$$

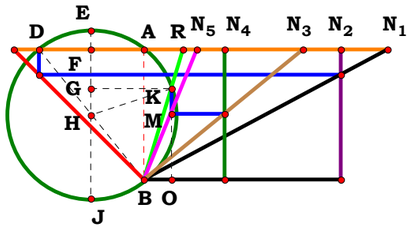
$$Den := \frac{\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot (A \cdot D \cdot E + B \cdot C \cdot N_u)} + \sqrt{B} \cdot (2 \cdot C \cdot F + D \cdot E)}{\sqrt{\left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot (A \cdot D \cdot E + B \cdot C \cdot N_u)} + \sqrt{B} \cdot (2 \cdot C \cdot F + D \cdot E)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{\sqrt{B} \cdot C \cdot N_u \cdot \sqrt{\left[\sqrt{B} \cdot (2 \cdot C \cdot F + D \cdot E) + \sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot (A \cdot D \cdot E + B \cdot C \cdot N_u)}\right]^2}}{\left[\sqrt{B} \cdot (2 \cdot C \cdot F + D \cdot E) + \sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot (A \cdot D \cdot E + B \cdot C \cdot N_u)}\right] \cdot \sqrt{B \cdot C^2 \cdot {N_u}^2}} = 0$$

4RST4B2R3



$N_1 = 1.86676$
$N_2 = 1.50839$
$N_3 = 1.22254$
$N_4 = 0.61966$
$N_5 = 0.41087$
$R = 0.29929$

Unit. $AB := 1$ Given. $N_1 := 1.86676$ $N_2 := 1.50839$ $N_3 := 1.22254$

$N_4 := .61966$ $N_5 := .41087$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{\sqrt{B}\cdot\left[\sqrt{B}\cdot D\cdot E-\sqrt{B\cdot D^2\cdot E^2-4\cdot C\cdot N_u\cdot\left(A\cdot D\cdot E+B\cdot C\cdot N_u\right)}\right]}{2\cdot\left(A\cdot D\cdot E+B\cdot C\cdot N_u\right)}=0.299284$$

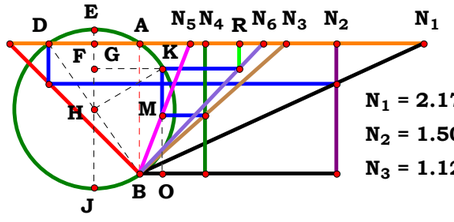
$$Num := \frac{\sqrt{B}\cdot\left[\sqrt{B}\cdot D\cdot E-\sqrt{B\cdot D^2\cdot E^2-4\cdot C\cdot N_u\cdot\left(A\cdot D\cdot E+B\cdot C\cdot N_u\right)}\right]}{\sqrt{\left[\sqrt{B}\cdot\left[\sqrt{B}\cdot D\cdot E-\sqrt{B\cdot D^2\cdot E^2-4\cdot C\cdot N_u\cdot\left(A\cdot D\cdot E+B\cdot C\cdot N_u\right)}\right]\right]^2}}$$

$$Den := \frac{2\cdot\left(A\cdot D\cdot E+B\cdot C\cdot N_u\right)}{\sqrt{\left[2\cdot\left(A\cdot D\cdot E+B\cdot C\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{B}\cdot\left[\sqrt{B}\cdot D\cdot E-\sqrt{B\cdot D^2\cdot E^2-4\cdot C\cdot N_u\cdot\left(A\cdot D\cdot E+B\cdot C\cdot N_u\right)}\right]\cdot\sqrt{\left(2\cdot A\cdot D\cdot E+2\cdot B\cdot C\cdot N_u\right)^2}}{\left(2\cdot A\cdot D\cdot E+2\cdot B\cdot C\cdot N_u\right)\cdot\sqrt{B\cdot\left[\sqrt{B}\cdot D\cdot E-\sqrt{B\cdot D^2\cdot E^2-4\cdot C\cdot N_u\cdot\left(A\cdot D\cdot E+B\cdot C\cdot N_u\right)}\right]^2}}=0$$

4RST4B2R5



$N_1 = 2.17671$
$N_2 = 1.50839$
$N_3 = 1.12332$
$N_4 = 0.50580$
$N_5 = 0.39150$
$N_6 = 0.94921$
$R = 0.76988$

Unit. $AB := 1$ Given. $N_1 := 2.17671$ $N_2 := 1.50839$ $N_3 := 1.12332$

$N_4 := .50580$ $N_5 := .39150$ $N_6 := .94921$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

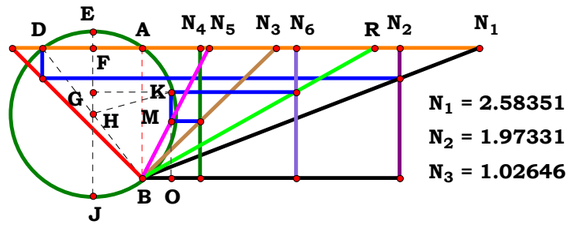
$$\frac{N_u \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot D \cdot E\right]}{2 \cdot F \cdot \sqrt{B} \cdot D \cdot E} = 0.76988$$

$$Num := \frac{N_u \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot D \cdot E\right]}{\sqrt{\left[N_u \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot D \cdot E\right]\right]^2}}$$

$$Den := \frac{2 \cdot F \cdot \sqrt{B} \cdot D \cdot E}{\sqrt{\left(2 \cdot F \cdot \sqrt{B} \cdot D \cdot E\right)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot D \cdot E\right] \cdot \sqrt{B \cdot D^2 \cdot E^2 \cdot F^2}}{\sqrt{B} \cdot D \cdot E \cdot F \cdot \sqrt{N_u^2 \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot D \cdot E\right]^2}} = 0$$



$N_4 = 0.44768$
$N_5 = 0.51742$
$N_6 = 1.18167$
$R = 1.78115$

Unit. $AB := 1$ Given. $N_1 := 2.58351$ $N_2 := 1.97331$ $N_3 := 1.02646$

$N_4 := .44768$ $N_5 := .51742$ $N_6 := 1.18167$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

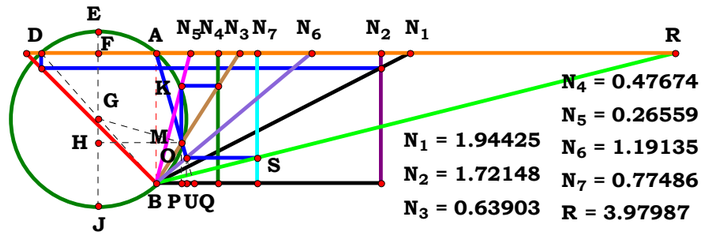
$$\frac{2 \cdot N_u \cdot \sqrt{B} \cdot D \cdot E}{F \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot D \cdot E\right]} = 1.78117$$

$$Num := \frac{2 \cdot N_u \cdot \sqrt{B} \cdot D \cdot E}{\sqrt{\left(2 \cdot N_u \cdot \sqrt{B} \cdot D \cdot E\right)^2}}$$

$$Den := \frac{F \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot D \cdot E\right]}{\sqrt{\left[F \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot D \cdot E\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B} \cdot D \cdot E \cdot N_u \cdot \sqrt{F^2 \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot D \cdot E\right]^2}}{F \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot D \cdot E\right] \cdot \sqrt{B \cdot D^2 \cdot E^2 \cdot N_u^2}} = 0$$



Unit. $AB := 1$ Given. $N_1 := 1.94425$ $N_2 := 1.72148$ $N_3 := .63903$ $N_4 := .47674$

$N_5 := .26559$ $N_6 := 1.19135$ $N_7 := .77486$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.

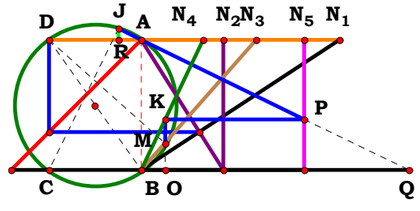
$$\frac{N_u \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot (2 \cdot C \cdot F + D \cdot E)\right]}{2 \cdot C \cdot F \cdot G \cdot \sqrt{B}} = 3.979731$$

$$Num := \frac{N_u \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot (2 \cdot C \cdot F + D \cdot E)\right]}{\sqrt{\left[N_u \cdot \left[\sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)} + \sqrt{B} \cdot (2 \cdot C \cdot F + D \cdot E)\right]\right]^2}}$$

$$Den := \frac{2 \cdot C \cdot F \cdot G \cdot \sqrt{B}}{\sqrt{\left(2 \cdot C \cdot F \cdot G \cdot \sqrt{B}\right)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[\sqrt{B} \cdot (2 \cdot C \cdot F + D \cdot E) + \sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)}\right] \cdot \sqrt{B \cdot C^2 \cdot F^2 \cdot G^2}}{\sqrt{B} \cdot C \cdot F \cdot G \cdot \sqrt{N_u^2 \cdot \left[\sqrt{B} \cdot (2 \cdot C \cdot F + D \cdot E) + \sqrt{B \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left(A \cdot D \cdot E + B \cdot C \cdot N_u\right)}\right]^2}} = 0$$



$N_1 = 1.51808$
$N_2 = 0.62698$
$N_3 = 0.88354$
$N_4 = 0.47437$
$N_5 = 1.24947$
$R = -0.17873$

Unit. $AB := 1$ Given. $N_1 := 1.51808$ $N_2 := .62698$ $N_3 := .88354$

$N_4 := .47437$ $N_5 := 1.24947$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)\cdot\left[[E\cdot(A+B)]\cdot N_u{}^2-B\cdot N_u\cdot\left(C^2-D\cdot E\right)-B\cdot N_u{}^3+C\cdot E\cdot(C-D)\cdot(A+B)\right]}{E^2\cdot\left[(A+B)\cdot N_u{}^2+B\cdot D\cdot N_u+C\cdot(C-D)\cdot(A+B)\right]^2+N_u{}^2\cdot\left(C^2+N_u{}^2\right)^2\cdot(A+B)^2}=-0.178733$$

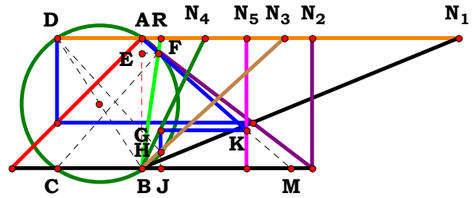
$$Num := \frac{N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)\cdot\left[[E\cdot(A+B)]\cdot N_u{}^2-B\cdot N_u\cdot\left(C^2-D\cdot E\right)-B\cdot N_u{}^3+C\cdot E\cdot(C-D)\cdot(A+B)\right]}{\sqrt{\left[N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)\cdot\left[[E\cdot(A+B)]\cdot N_u{}^2-B\cdot N_u\cdot\left(C^2-D\cdot E\right)-B\cdot N_u{}^3+C\cdot E\cdot(C-D)\cdot(A+B)\right]\right]^2}}$$

$$Den := \frac{E^2\cdot\left[(A+B)\cdot N_u{}^2+B\cdot D\cdot N_u+C\cdot(C-D)\cdot(A+B)\right]^2+N_u{}^2\cdot\left(C^2+N_u{}^2\right)^2\cdot(A+B)^2}{\sqrt{\left[E^2\cdot\left[(A+B)\cdot N_u{}^2+B\cdot D\cdot N_u+C\cdot(C-D)\cdot(A+B)\right]^2+N_u{}^2\cdot\left(C^2+N_u{}^2\right)^2\cdot(A+B)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = -1$ $Den = 1$ $L = -1$

$$L-\frac{\sqrt{\left[E^2\cdot\left[(A+B)\cdot N_u{}^2+B\cdot D\cdot N_u+C\cdot(A+B)\cdot(C-D)\right]^2+N_u{}^2\cdot\left(C^2+N_u{}^2\right)^2\cdot(A+B)^2\right]^2}\cdot\left[N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)\cdot\left[[E\cdot(A+B)]\cdot N_u{}^2-B\cdot N_u\cdot\left(C^2-D\cdot E\right)-B\cdot N_u{}^3+C\cdot E\cdot(C-D)\cdot(A+B)\right]\right]}{\left[E^2\cdot\left[(A+B)\cdot N_u{}^2+B\cdot D\cdot N_u+C\cdot(A+B)\cdot(C-D)\right]^2+N_u{}^2\cdot\left(C^2+N_u{}^2\right)^2\cdot(A+B)^2\right]\cdot\sqrt{\left[N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)\cdot\left[[E\cdot(A+B)]\cdot N_u{}^2-B\cdot N_u\cdot\left(C^2-D\cdot E\right)-B\cdot N_u{}^3+C\cdot E\cdot(C-D)\cdot(A+B)\right]\right]^2}}=0$$

4RST4B3R2



$N_1 = 2.42854$
$N_2 = 1.30499$
$N_3 = 1.09663$
$N_4 = 0.48406$
$N_5 = 0.80392$
$R = 0.14432$

Unit. $AB := 1$ Given. $N_1 := 2.42854$ $N_2 := 1.30499$ $N_3 := 1.09663$

$N_4 := .48406$ $N_5 := .80392$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{(A+B)\cdot\left[E\cdot\left[\left(C^2+N_u{}^2\right)\cdot(A+B)-D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]-\left(B\cdot C^2\cdot N_u+B\cdot N_u{}^3\right)\right]}{E\cdot B\cdot\left[\left(C^2+N_u{}^2\right)\cdot(A+B)-D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]+N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)^2}=0.144317$$

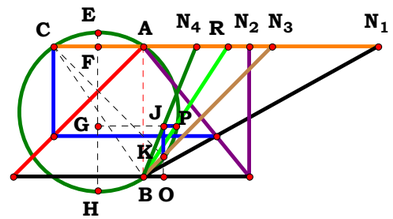
$$Num := \frac{(A+B)\cdot\left[E\cdot\left[\left(C^2+N_u{}^2\right)\cdot(A+B)-D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]-\left(B\cdot C^2\cdot N_u+B\cdot N_u{}^3\right)\right]}{\sqrt{\left[(A+B)\cdot\left[E\cdot\left[\left(C^2+N_u{}^2\right)\cdot(A+B)-D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]-\left(B\cdot C^2\cdot N_u+B\cdot N_u{}^3\right)\right]\right]^2}}$$

$$Den := \frac{E\cdot B\cdot\left[\left(C^2+N_u{}^2\right)\cdot(A+B)-D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]+N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)^2}{\sqrt{\left[E\cdot B\cdot\left[\left(C^2+N_u{}^2\right)\cdot(A+B)-D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]+N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)^2\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{\left[B\cdot E\cdot\left[D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]-\left(C^2+N_u{}^2\right)\cdot(A+B)\right]-N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)^2\right]^2}\cdot(A+B)\cdot\left[E\cdot\left[D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]-\left(C^2+N_u{}^2\right)\cdot(A+B)\right]+B\cdot N_u{}^3+B\cdot C^2\cdot N_u\right]}{\left[B\cdot E\cdot\left[D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]-\left(C^2+N_u{}^2\right)\cdot(A+B)\right]-N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)^2\right]\cdot\sqrt{(A+B)^2\cdot\left[E\cdot\left[D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]-\left(C^2+N_u{}^2\right)\cdot(A+B)\right]+B\cdot N_u{}^3+B\cdot C^2\cdot N_u\right]^2}}=0$$



$N_1 = 1.79896$
$N_2 = 0.81101$
$N_3 = 0.99009$
$N_4 = 0.40657$
$R = 0.64704$

Unit. $AB := 1$ **Given.** $N_1 := 1.79896$ $N_2 := .81101$ $N_3 := .99009$ $N_4 := .40657$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{4\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\cdot\left[C^2\cdot(A+B)+N_u{}^2\cdot(A+B)-D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]+B^2\cdot\left(C^2+N_u{}^2\right)^2}-B\cdot\left(C^2+N_u{}^2\right)}{2\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]}=0.647038$$

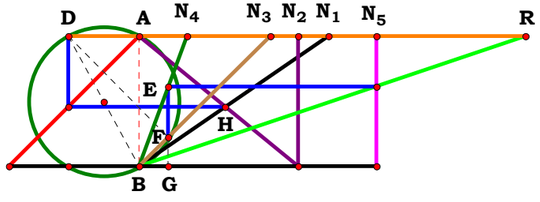
$$Num := \frac{\sqrt{4\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\cdot\left[C^2\cdot(A+B)+N_u{}^2\cdot(A+B)-D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]+B^2\cdot\left(C^2+N_u{}^2\right)^2}-B\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[\sqrt{4\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\cdot\left[C^2\cdot(A+B)+N_u{}^2\cdot(A+B)-D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]+B^2\cdot\left(C^2+N_u{}^2\right)^2}-B\cdot\left(C^2+N_u{}^2\right)\right]^2}}$$

$$Den := \frac{2\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]}{\sqrt{\left[2\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{D^2\cdot\left[C\cdot(A+B)-B\cdot N_u\right]^2}\cdot\left[\sqrt{4\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\cdot\left[C^2\cdot(A+B)+N_u{}^2\cdot(A+B)-D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]+B^2\cdot\left(C^2+N_u{}^2\right)^2}-B\cdot\left(C^2+N_u{}^2\right)\right]}{D\cdot\sqrt{\left[\sqrt{4\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\cdot\left[C^2\cdot(A+B)+N_u{}^2\cdot(A+B)-D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]+B^2\cdot\left(C^2+N_u{}^2\right)^2}-B\cdot\left(C^2+N_u{}^2\right)\right]^2}\cdot\left[C\cdot(A+B)-B\cdot N_u\right]}=0$$

4RST4B3R7



$N_1 = 1.45027$
$N_2 = 1.21782$
$N_3 = 1.00946$
$N_4 = 0.36783$
$N_5 = 1.82093$
$R = 2.96844$

Unit. $AB := 1$ Given. $N_1 := 1.45027$ $N_2 := 1.21782$ $N_3 := 1.00946$

$N_4 := .36783$ $N_5 := 1.82093$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{D \cdot E \cdot \left[C \cdot (A + B) - B \cdot N_u\right]} = 2.968434$$

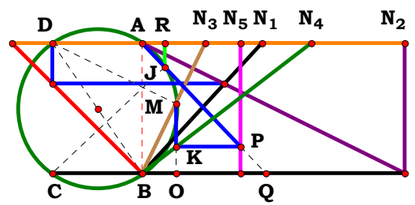
$$Num := \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{D \cdot E \cdot \left[C \cdot (A + B) - B \cdot N_u\right]}{\sqrt{\left[D \cdot E \cdot \left[C \cdot (A + B) - B \cdot N_u\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{D^2 \cdot E^2 \cdot \left[C \cdot (A + B) - B \cdot N_u\right]^2}}{D \cdot E \cdot \left[C \cdot (A + B) - B \cdot N_u\right] \cdot \sqrt{N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$



$N_1 = 0.91756$
$N_2 = 2.01205$
$N_3 = 0.48642$
$N_4 = 1.29767$
$N_5 = 0.75549$
$R = 0.17469$

Unit. $AB := 1$ **Given.** $N_1 := .91756$ $N_2 := 2.01206$ $N_3 := .48642$ $N_4 := 1.29767$ $N_5 := .75549$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5}$$

Descriptions.

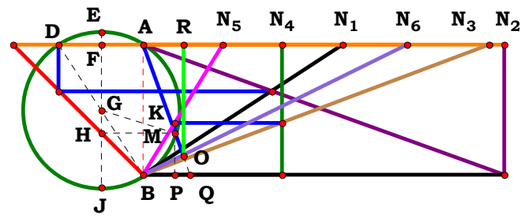
$$\frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A+B) \cdot \left[C^2 \cdot E \cdot (A+B) - A \cdot N_u \cdot \left[C^2 - N_u \cdot (E - N_u)\right] + E \cdot N_u \cdot \left(A \cdot D + B \cdot N_u\right) - C \cdot D \cdot E \cdot (A+B)\right]}{E^2 \cdot \left[C^2 \cdot (A+B) + {N_u}^2 \cdot (A+B) - D \cdot \left[C \cdot (A+B) - A \cdot N_u\right]\right]^2 + {N_u}^2 \cdot \left(C^2 + {N_u}^2\right)^2 \cdot (A+B)^2} = 0.174688$$

$$Num := \frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A+B) \cdot \left[C^2 \cdot E \cdot (A+B) - A \cdot N_u \cdot \left[C^2 - N_u \cdot (E - N_u)\right] + E \cdot N_u \cdot \left(A \cdot D + B \cdot N_u\right) - C \cdot D \cdot E \cdot (A+B)\right]}{\sqrt{\left[N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A+B) \cdot \left[C^2 \cdot E \cdot (A+B) - A \cdot N_u \cdot \left[C^2 - N_u \cdot (E - N_u)\right] + E \cdot N_u \cdot \left(A \cdot D + B \cdot N_u\right) - C \cdot D \cdot E \cdot (A+B)\right]\right]^2}}$$

$$Den := \frac{E^2 \cdot \left[C^2 \cdot (A+B) + {N_u}^2 \cdot (A+B) - D \cdot \left[C \cdot (A+B) - A \cdot N_u\right]\right]^2 + {N_u}^2 \cdot \left(C^2 + {N_u}^2\right)^2 \cdot (A+B)^2}{\sqrt{\left[E^2 \cdot \left[C^2 \cdot (A+B) + {N_u}^2 \cdot (A+B) - D \cdot \left[C \cdot (A+B) - A \cdot N_u\right]\right]^2 + {N_u}^2 \cdot \left(C^2 + {N_u}^2\right)^2 \cdot (A+B)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A+B) \cdot \sqrt{\left[E^2 \cdot \left[C^2 \cdot (A+B) - D \cdot \left[C \cdot (A+B) - A \cdot N_u\right] + {N_u}^2 \cdot (A+B)\right]^2 + {N_u}^2 \cdot \left(C^2 + {N_u}^2\right)^2 \cdot (A+B)^2\right]^2} \cdot \left[\begin{array}{l} C^2 \cdot E \cdot (A+B) - A \cdot N_u \cdot \left[C^2 - N_u \cdot (E - N_u)\right] \ \ldots \\ + \ E \cdot N_u \cdot \left(A \cdot D + B \cdot N_u\right) - C \cdot D \cdot E \cdot (A+B) \end{array}\right]}{\left[E^2 \cdot \left[C^2 \cdot (A+B) - D \cdot \left[C \cdot (A+B) - A \cdot N_u\right] + {N_u}^2 \cdot (A+B)\right]^2 + {N_u}^2 \cdot \left(C^2 + {N_u}^2\right)^2 \cdot (A+B)^2\right] \cdot \sqrt{{N_u}^2 \cdot \left(C^2 + {N_u}^2\right)^2 \cdot (A+B)^2 \cdot \left[\begin{array}{l} C^2 \cdot E \cdot (A+B) - A \cdot N_u \cdot \left[C^2 - N_u \cdot (E - N_u)\right] \ \ldots \\ + \ E \cdot N_u \cdot \left(A \cdot D + B \cdot N_u\right) - C \cdot D \cdot E \cdot (A+B) \end{array}\right]^2}} = 0$$



$N_1 = 1.52776$
$N_2 = 2.76754$
$N_3 = 2.65604$
$N_4 = 1.06521$
$N_5 = 0.61020$
$N_6 = 2.02433$
$R = 0.30553$

Unit. $AB := 1$ **Given.** $N_1 := 1.52776$ $N_2 := 2.76754$ $N_3 := 2.65604$

$N_4 := 1.06521$ $N_5 := .61020$ $N_6 := 2.02433$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2\cdot C\cdot N_u\cdot(A+B)}{\sqrt{\left[D^2\cdot E^2\cdot(A+B)-4\cdot C\cdot N_u\cdot\left[C\cdot N_u\cdot(A+B)+A\cdot D\cdot E\right]\right]\cdot(A+B)}+(2\cdot C\cdot F+D\cdot E)\cdot(A+B)}=0.305528$$

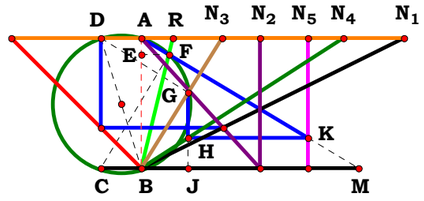
$$Num := \frac{2\cdot C\cdot N_u\cdot(A+B)}{\sqrt{\left[2\cdot C\cdot N_u\cdot(A+B)\right]^2}}$$

$$Den := \frac{\sqrt{\left[D^2\cdot E^2\cdot(A+B)-4\cdot C\cdot N_u\cdot\left[C\cdot N_u\cdot(A+B)+A\cdot D\cdot E\right]\right]\cdot(A+B)}+(2\cdot C\cdot F+D\cdot E)\cdot(A+B)}{\sqrt{\left[\sqrt{\left[D^2\cdot E^2\cdot(A+B)-4\cdot C\cdot N_u\cdot\left[C\cdot N_u\cdot(A+B)+A\cdot D\cdot E\right]\right]\cdot(A+B)}+(2\cdot C\cdot F+D\cdot E)\cdot(A+B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{C\cdot N_u\cdot\sqrt{\left[(A+B)\cdot(2\cdot C\cdot F+D\cdot E)+\sqrt{\left[D^2\cdot E^2\cdot(A+B)-4\cdot C\cdot N_u\cdot\left[C\cdot N_u\cdot(A+B)+A\cdot D\cdot E\right]\right]\cdot(A+B)}\right]^2}\cdot(A+B)}{\left[(A+B)\cdot(2\cdot C\cdot F+D\cdot E)+\sqrt{\left[D^2\cdot E^2\cdot(A+B)-4\cdot C\cdot N_u\cdot\left[C\cdot N_u\cdot(A+B)+A\cdot D\cdot E\right]\right]\cdot(A+B)}\right]\cdot\sqrt{C^2\cdot {N_u}^2\cdot(A+B)^2}}=0$$



$N_1 = 2.01205$
$N_2 = 0.90787$
$N_3 = 0.62203$
$N_4 = 1.54950$
$N_5 = 1.27852$
$R = 0.24327$

Unit. $AB := 1$ Given. $N_1 := 2.01205$ $N_2 := .90787$ $N_3 := .62203$

$N_4 := 1.54950$ $N_5 := 1.27852$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{(A+B)\cdot\left[E\cdot\left[C^2\cdot(A+B)+N_u{}^2\cdot(A+B)-C\cdot D\cdot(A+B)+A\cdot D\cdot N_u\right]-\left[A\cdot N_u\cdot\left(C^2+N_u{}^2\right)\right]\right]}{E\cdot A\cdot\left[C^2\cdot(A+B)+N_u{}^2\cdot(A+B)-C\cdot D\cdot(A+B)+A\cdot D\cdot N_u\right]+N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)^2}=0.243275$$

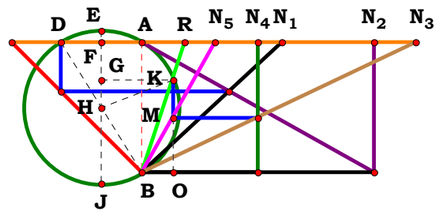
$$Num := \frac{(A+B)\cdot\left[E\cdot\left[C^2\cdot(A+B)+N_u{}^2\cdot(A+B)-C\cdot D\cdot(A+B)+A\cdot D\cdot N_u\right]-\left[A\cdot N_u\cdot\left(C^2+N_u{}^2\right)\right]\right]}{\sqrt{\left[(A+B)\cdot\left[E\cdot\left[C^2\cdot(A+B)+N_u{}^2\cdot(A+B)-C\cdot D\cdot(A+B)+A\cdot D\cdot N_u\right]-\left[A\cdot N_u\cdot\left(C^2+N_u{}^2\right)\right]\right]\right]^2}}$$

$$Den := \frac{E\cdot A\cdot\left[C^2\cdot(A+B)+N_u{}^2\cdot(A+B)-C\cdot D\cdot(A+B)+A\cdot D\cdot N_u\right]+N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)^2}{\sqrt{\left[E\cdot A\cdot\left[C^2\cdot(A+B)+N_u{}^2\cdot(A+B)-C\cdot D\cdot(A+B)+A\cdot D\cdot N_u\right]+N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)^2\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{\left[A\cdot E\cdot\left[(A+B)\cdot C^2-D\cdot(A+B)\cdot C+(A+B)\cdot N_u{}^2+A\cdot D\cdot N_u\right]+N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)^2\right]^2}\cdot(A+B)\cdot\left[E\cdot\left[(A+B)\cdot C^2-D\cdot(A+B)\cdot C+(A+B)\cdot N_u{}^2+A\cdot D\cdot N_u\right]-A\cdot N_u\cdot\left(C^2+N_u{}^2\right)\right]}{\sqrt{(A+B)^2\cdot\left[E\cdot\left[(A+B)\cdot C^2-D\cdot(A+B)\cdot C+(A+B)\cdot N_u{}^2+A\cdot D\cdot N_u\right]-A\cdot N_u\cdot\left(C^2+N_u{}^2\right)\right]^2}\cdot\left[A\cdot E\cdot\left[(A+B)\cdot C^2-D\cdot(A+B)\cdot C+(A+B)\cdot N_u{}^2+A\cdot D\cdot N_u\right]+N_u\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)^2\right]}}=0$$



$N_1 = 1.07253$
$N_2 = 1.77959$
$N_3 = 2.10395$
$N_4 = 0.89086$
$N_5 = 0.56178$
$R = 0.33403$

Unit. $AB := 1$ Given. $N_1 := 1.07253$ $N_2 := 1.77959$ $N_3 := 2.10395$

$N_4 := .89086$ $N_5 := .56178$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{2 \cdot C \cdot N_u \cdot (A+B)}{\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)} = 0.334028$$

$$Num := \frac{2 \cdot C \cdot N_u \cdot (A+B)}{\sqrt{\left[2 \cdot C \cdot N_u \cdot (A+B)\right]^2}}$$

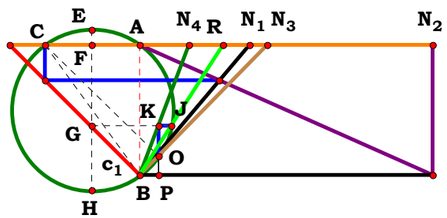
$$Den := \frac{\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)}{\sqrt{\left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot N_u \cdot \sqrt{\left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]^2} \cdot (A+B)}{\left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right] \cdot \sqrt{C^2 \cdot {N_u}^2 \cdot (A+B)^2}} = 0$$

4RST4B4R4



$N_1 = 0.84007$
$N_2 = 2.24451$
$N_3 = 0.98040$
$N_4 = 0.37752$
$R = 0.63945$

Unit. $AB := 1$ Given. $N_1 := .84007$ $N_2 := 2.24451$ $N_3 := .98040$

$N_4 := .37752$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]\cdot\left[(A+B)\cdot C^2-D\cdot(A+B)\cdot C+(A+B)\cdot N_u{}^2+A\cdot D\cdot N_u\right]}-A\cdot\left(C^2+N_u{}^2\right)}{2\cdot D\cdot\left(A\cdot C+B\cdot C-A\cdot N_u\right)} = 0.63945$$

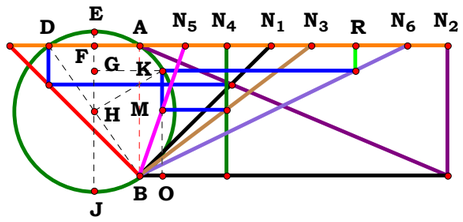
$$Num := \frac{\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]\cdot\left[(A+B)\cdot C^2-D\cdot(A+B)\cdot C+(A+B)\cdot N_u{}^2+A\cdot D\cdot N_u\right]}-A\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]\cdot\left[(A+B)\cdot C^2-D\cdot(A+B)\cdot C+(A+B)\cdot N_u{}^2+A\cdot D\cdot N_u\right]}-A\cdot\left(C^2+N_u{}^2\right)\right]^2}}$$

$$Den := \frac{2\cdot D\cdot\left(A\cdot C+B\cdot C-A\cdot N_u\right)}{\sqrt{\left[2\cdot D\cdot\left(A\cdot C+B\cdot C-A\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]\cdot\left[(A+B)\cdot C^2-D\cdot(A+B)\cdot C+(A+B)\cdot N_u{}^2+A\cdot D\cdot N_u\right]}-A\cdot C^2-A\cdot N_u{}^2\right]\cdot\sqrt{D^2\cdot\left(A\cdot C+B\cdot C-A\cdot N_u\right)^2}}{D\cdot\sqrt{\left[A\cdot\left(C^2+N_u{}^2\right)-\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]\cdot\left[(A+B)\cdot C^2-D\cdot(A+B)\cdot C+(A+B)\cdot N_u{}^2+A\cdot D\cdot N_u\right]}\right]^2}\cdot\left(A\cdot C+B\cdot C-A\cdot N_u\right)} = 0$$

4RST4B4R5



$N_1 = 1.00473$ $N_5 = 0.34869$

$N_2 = 2.36074$ $N_6 = 2.05339$

$N_3 = 1.31704$ $R = 1.65618$

$N_4 = 0.67045$

Unit. $AB := 1$ Given. $N_1 := 1.00473$ $N_2 := 2.36074$ $N_3 := 1.31704$

$N_4 := .67045$ $N_5 := .34869$ $N_6 := 2.05339$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]}{2 \cdot F \cdot (A+B) \cdot D \cdot E} = 1.656189$$

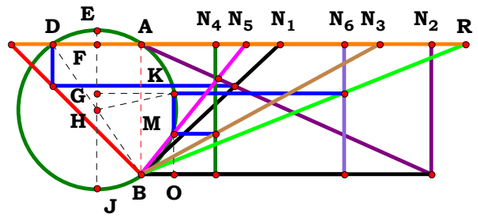
$$Num := \frac{N_u \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]}{\sqrt{\left[N_u \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]\right]^2}}$$

$$Den := \frac{2 \cdot F \cdot (A+B) \cdot D \cdot E}{\sqrt{[2 \cdot F \cdot (A+B) \cdot D \cdot E]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right] \cdot \sqrt{D^2 \cdot E^2 \cdot F^2 \cdot (A+B)^2}}{D \cdot E \cdot F \cdot \sqrt{N_u{}^2 \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]^2 \cdot (A+B)}} = 0$$

4RST4B4R6



$N_1 = 1.06284$
$N_2 = 2.22514$
$N_3 = 1.83038$
$N_4 = 0.57360$
$N_5 = 0.80392$
$N_6 = 1.55941$
$R = 2.48850$

Unit. $AB := 1$ Given. $N_1 := 1.06284$ $N_2 := 2.22514$ $N_3 := 1.83038$

$N_4 := .57360$ $N_5 := .80392$ $N_6 := 1.55941$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2 \cdot N_u \cdot (A+B) \cdot D \cdot E}{F \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]} = 2.488535$$

$$Num := \frac{2 \cdot N_u \cdot (A+B) \cdot D \cdot E}{\sqrt{\left[2 \cdot N_u \cdot (A+B) \cdot D \cdot E\right]^2}}$$

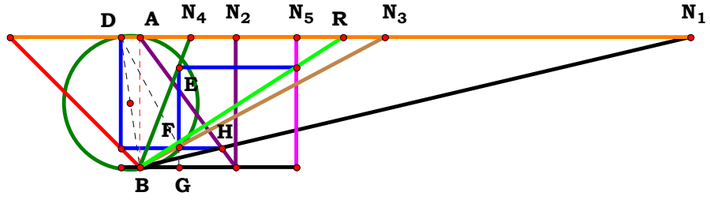
$$Den := \frac{F \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]}{\sqrt{\left[F \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot E \cdot N_u \cdot \sqrt{F^2 \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]^2 \cdot (A+B)}}{F \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right] \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (A+B)^2}} = 0$$

4RST4B4R7



$N_1 = 4.22041$
$N_2 = 0.73353$
$N_3 = 1.88118$
$N_4 = 0.38720$
$N_5 = 1.20104$
$R = 1.55525$

Unit. $AB := 1$ Given. $N_1 := 4.22041$ $N_2 := .73353$ $N_3 := 1.88118$

$N_4 := .38720$ $N_5 := 1.20104$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

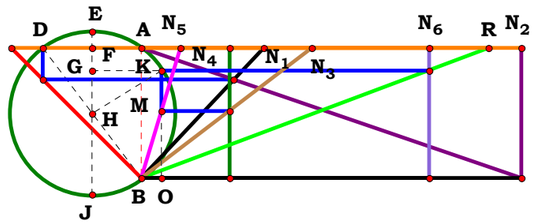
$$\frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{D \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right]} = 1.555245$$

$$Num := \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{D \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right]}{\sqrt{\left[D \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{D^2 \cdot E^2 \cdot \left[C \cdot (A + B) - A \cdot N_u\right]^2}}{D \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right] \cdot \sqrt{N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$



$N_1 = 0.93693$
$N_2 = 2.91283$
$N_3 = 1.30735$
$N_4 = 0.68014$
$N_5 = 0.30026$
$N_6 = 2.20836$
$R = 2.66796$

Unit. $AB := 1$ Given. $N_1 := .93693$ $N_2 := 2.91283$ $N_3 := 1.30735$

$N_4 := .68014$ $N_5 := .30026$ $N_6 := 2.20836$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2 \cdot N_u \cdot (A+B) \cdot D \cdot E}{F \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]} = 2.667968$$

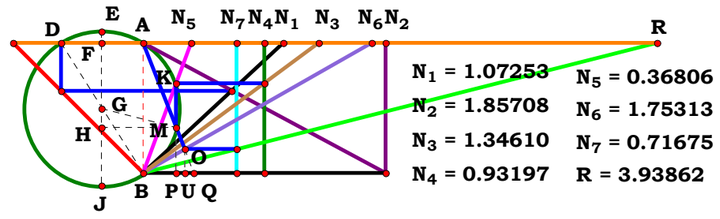
$$Num := \frac{2 \cdot N_u \cdot (A+B) \cdot D \cdot E}{\sqrt{\left[2 \cdot N_u \cdot (A+B) \cdot D \cdot E\right]^2}}$$

$$Den := \frac{F \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]}{\sqrt{\left[F \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot E \cdot N_u \cdot \sqrt{F^2 \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right]^2} \cdot (A+B)}{F \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + D \cdot E \cdot (A+B)\right] \cdot \sqrt{D^2 \cdot E^2 \cdot {N_u}^2 \cdot (A+B)^2}} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 1.07253$ $N_2 := 1.85708$ $N_3 := 1.34610$ $N_4 := .93197$

$N_5 := .36806$ $N_6 := 1.75313$ $N_7 := .71675$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.

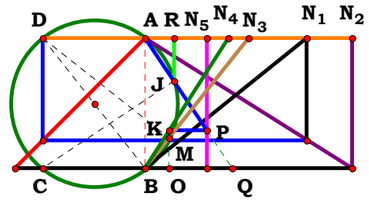
$$\frac{N_u \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + (2 \cdot C \cdot F + D \cdot E) \cdot (A+B)\right]}{2 \cdot C \cdot F \cdot G \cdot (A+B)} = 3.938664$$

$$Num := \frac{N_u \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + (2 \cdot C \cdot F + D \cdot E) \cdot (A+B)\right]}{\sqrt{\left[N_u \cdot \left[\sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)} + (2 \cdot C \cdot F + D \cdot E) \cdot (A+B)\right]\right]^2}}$$

$$Den := \frac{2 \cdot C \cdot F \cdot G \cdot (A+B)}{\sqrt{[2 \cdot C \cdot F \cdot G \cdot (A+B)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[(A+B) \cdot (2 \cdot C \cdot F + D \cdot E) + \sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)}\right] \cdot \sqrt{C^2 \cdot F^2 \cdot G^2 \cdot (A+B)^2}}{C \cdot F \cdot G \cdot \sqrt{N_u^2 \cdot \left[(A+B) \cdot (2 \cdot C \cdot F + D \cdot E) + \sqrt{\left[D^2 \cdot E^2 \cdot (A+B) - 4 \cdot C \cdot N_u \cdot \left[C \cdot N_u \cdot (A+B) + A \cdot D \cdot E\right]\right] \cdot (A+B)}\right]^2} \cdot (A+B)} = 0$$



$N_1 = 1.23719$
$N_2 = 1.58588$
$N_3 = 0.79637$
$N_4 = 0.63903$
$N_5 = 0.47460$
$R = 0.22134$

Unit. $AB := 1$ **Given.** $N_1 := 1.23719$ $N_2 := 1.58588$ $N_3 := .79637$

$N_4 := .63903$ $N_5 := .47460$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

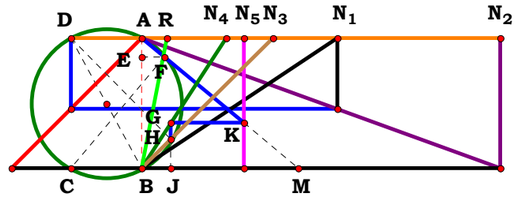
$$\frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot A \cdot \left[A \cdot C \cdot E \cdot (C - D) - B \cdot N_u \cdot \left(C^2 + N_u^2\right) + E \cdot N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]}{E^2 \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2} = 0.221344$$

$$Num := \frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot A \cdot \left[A \cdot C \cdot E \cdot (C - D) - B \cdot N_u \cdot \left(C^2 + N_u^2\right) + E \cdot N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]}{\sqrt{\left[N_u \cdot \left(C^2 + N_u^2\right) \cdot A \cdot \left[A \cdot C \cdot E \cdot (C - D) - B \cdot N_u \cdot \left(C^2 + N_u^2\right) + E \cdot N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]\right]^2}}$$

$$Den := \frac{E^2 \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2}{\sqrt{\left[E^2 \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{\left[E^2 \cdot \left[N_u \cdot \left(B \cdot D + A \cdot N_u\right) + A \cdot C \cdot (C - D)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right]^2} \cdot \left(C^2 + N_u^2\right) \cdot \left[E \cdot N_u \cdot \left(B \cdot D + A \cdot N_u\right) - B \cdot N_u \cdot \left(C^2 + N_u^2\right) + A \cdot C \cdot E \cdot (C - D)\right]}{\left[E^2 \cdot \left[N_u \cdot \left(B \cdot D + A \cdot N_u\right) + A \cdot C \cdot (C - D)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right] \cdot \sqrt{A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot \left[E \cdot N_u \cdot \left(B \cdot D + A \cdot N_u\right) - B \cdot N_u \cdot \left(C^2 + N_u^2\right) + A \cdot C \cdot E \cdot (C - D)\right]^2}} = 0$$



$N_1 = 1.49870$
$N_2 = 2.74817$
$N_3 = 1.00946$
$N_4 = 0.64872$
$N_5 = 0.78455$
$R = 0.19783$

Unit. $AB := 1$ **Given.** $N_1 := 1.49870$ $N_2 := 2.74817$ $N_3 := 1.00946$

$N_4 := .64872$ $N_5 := .78455$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A\cdot\left[E\cdot\left[A\cdot C\cdot(C-D)+N_u\cdot\left(B\cdot D+A\cdot N_u\right)\right]-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]}{E\cdot B\cdot\left[A\cdot C\cdot(C-D)+N_u\cdot\left(B\cdot D+A\cdot N_u\right)\right]+A^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)} = 0.197829$$

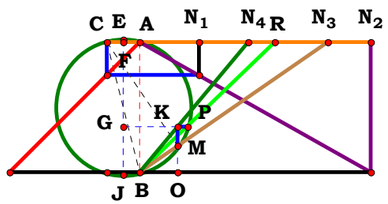
$$Num := \frac{A\cdot\left[E\cdot\left[A\cdot C\cdot(C-D)+N_u\cdot\left(B\cdot D+A\cdot N_u\right)\right]-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]}{\sqrt{\left[A\cdot\left[E\cdot\left[A\cdot C\cdot(C-D)+N_u\cdot\left(B\cdot D+A\cdot N_u\right)\right]-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]\right]^2}}$$

$$Den := \frac{B\cdot\left[A\cdot C\cdot(C-D)+N_u\cdot\left(B\cdot D+A\cdot N_u\right)\right]+A^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)}{\sqrt{\left[B\cdot\left[A\cdot C\cdot(C-D)+N_u\cdot\left(B\cdot D+A\cdot N_u\right)\right]+A^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A\cdot\sqrt{\left[B\cdot\left[N_u\cdot\left(B\cdot D+A\cdot N_u\right)+A\cdot C\cdot(C-D)\right]+A^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]^2}\cdot\left[E\cdot\left[N_u\cdot\left(B\cdot D+A\cdot N_u\right)+A\cdot C\cdot(C-D)\right]-B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]}{\sqrt{A^2\cdot\left[E\cdot\left[N_u\cdot\left(B\cdot D+A\cdot N_u\right)+A\cdot C\cdot(C-D)\right]-B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]^2}\cdot\left[B\cdot\left[N_u\cdot\left(B\cdot D+A\cdot N_u\right)+A\cdot C\cdot(C-D)\right]+A^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]} = 0$$

4RST4B5R4



$N_1 = 0.45264$
$N_2 = 1.76991$
$N_3 = 1.44532$
$N_4 = 0.83275$
$R = 1.03672$

Unit. $AB := 1$ Given. $N_1 := .45264$ $N_2 := 1.76991$ $N_3 := 1.44532$

$N_4 := .83275$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{4\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)\cdot\left[A\cdot C\cdot(C-D)+N_u\cdot\left(B\cdot D+A\cdot N_u\right)\right]+B^2\cdot\left(C^2+N_u{}^2\right)^2}-B\cdot\left(C^2+N_u{}^2\right)}{2\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)}=1.03672$$

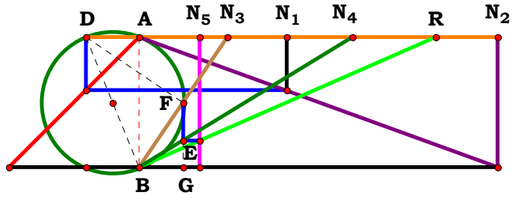
$$Num := \frac{\sqrt{4\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)\cdot\left[A\cdot C\cdot(C-D)+N_u\cdot\left(B\cdot D+A\cdot N_u\right)\right]+B^2\cdot\left(C^2+N_u{}^2\right)^2}-B\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[\sqrt{4\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)\cdot\left[A\cdot C\cdot(C-D)+N_u\cdot\left(B\cdot D+A\cdot N_u\right)\right]+B^2\cdot\left(C^2+N_u{}^2\right)^2}-B\cdot\left(C^2+N_u{}^2\right)\right]^2}}$$

$$Den := \frac{2\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)}{\sqrt{\left[2\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{B^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot D\cdot\left[N_u\cdot\left(B\cdot D+A\cdot N_u\right)+A\cdot C\cdot(C-D)\right]\cdot\left(A\cdot C-B\cdot N_u\right)}-B\cdot\left(C^2+N_u{}^2\right)\right]\cdot\sqrt{D^2\cdot\left(A\cdot C-B\cdot N_u\right)^2}}{D\cdot\sqrt{\left[\sqrt{B^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot D\cdot\left[N_u\cdot\left(B\cdot D+A\cdot N_u\right)+A\cdot C\cdot(C-D)\right]\cdot\left(A\cdot C-B\cdot N_u\right)}-B\cdot\left(C^2+N_u{}^2\right)\right]^2}\cdot\left(A\cdot C-B\cdot N_u\right)}=0$$

4RST4ABR7



$N_1 = 1.13064$
$N_2 = 2.74817$
$N_3 = 0.68014$
$N_4 = 1.63667$
$N_5 = 0.46492$
$R = 2.27207$

Unit. $AB := 1$ Given. $N_1 := 1.13064$ $N_2 := 2.74817$ $N_3 := .68014$

$N_4 := 1.63667$ $N_5 := .46492$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[D \cdot \left(A \cdot C - B \cdot N_u\right)\right]} = 2.272076$$

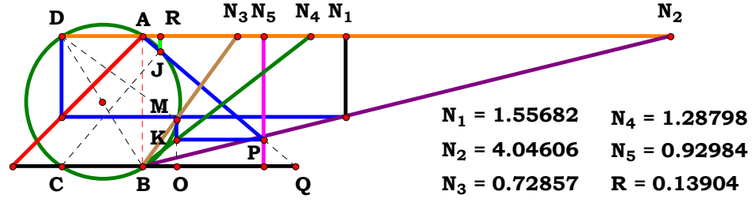
$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{E \cdot \left[D \cdot \left(A \cdot C - B \cdot N_u\right)\right]}{\sqrt{\left[E \cdot \left[D \cdot \left(A \cdot C - B \cdot N_u\right)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{D^2 \cdot E^2 \cdot \left(A \cdot C - B \cdot N_u\right)^2}}{D \cdot E \cdot \left(A \cdot C - B \cdot N_u\right) \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST4B6R0



$N_1 = 1.55682$ $N_4 = 1.28798$
$N_2 = 4.04606$ $N_5 = 0.92984$
$N_3 = 0.72857$ $R = 0.13904$

Unit. $AB := 1$ **Given.** $N_1 := 1.55682$ $N_2 := 4.04606$ $N_3 := .72857$

$N_4 := 1.28798$ $N_5 := .92984$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[A \cdot C^2 \cdot E - N_u^3 \cdot (A - B) - C^2 \cdot N_u \cdot (A - B) + A \cdot E \cdot N_u \cdot \left(D + N_u\right) - D \cdot E \cdot \left(A \cdot C + B \cdot N_u\right)\right]}{E^2 \cdot \left[A \cdot \left(C^2 + N_u^2\right) - A \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2} = 0.139036$$

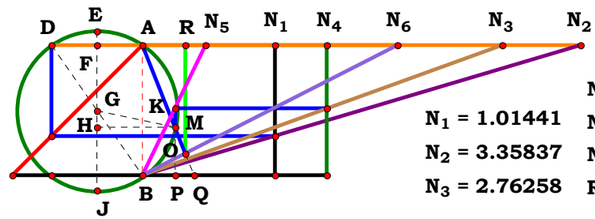
$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[A \cdot C^2 \cdot E - N_u^3 \cdot (A - B) - C^2 \cdot N_u \cdot (A - B) + A \cdot E \cdot N_u \cdot \left(D + N_u\right) - D \cdot E \cdot \left(A \cdot C + B \cdot N_u\right)\right]}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[A \cdot C^2 \cdot E - N_u^3 \cdot (A - B) - C^2 \cdot N_u \cdot (A - B) + A \cdot E \cdot N_u \cdot \left(D + N_u\right) - D \cdot E \cdot \left(A \cdot C + B \cdot N_u\right)\right]\right]^2}}$$

$$Den := \frac{E^2 \cdot \left[A \cdot \left(C^2 + N_u^2\right) - A \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2}{\sqrt{\left[E^2 \cdot \left[A \cdot \left(C^2 + N_u^2\right) - A \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{\left[E^2 \cdot \left[A \cdot \left(C^2 + N_u^2\right) - A \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right]^2} \cdot \left(C^2 + N_u^2\right) \cdot \left[A \cdot C^2 \cdot E - N_u^3 \cdot (A - B) - C^2 \cdot N_u \cdot (A - B) + A \cdot E \cdot N_u \cdot \left(D + N_u\right) - D \cdot E \cdot \left(A \cdot C + B \cdot N_u\right)\right]}{\left[E^2 \cdot \left[A \cdot \left(C^2 + N_u^2\right) - A \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right] \cdot \sqrt{A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot \left[A \cdot C^2 \cdot E - N_u^3 \cdot (A - B) - C^2 \cdot N_u \cdot (A - B) + A \cdot E \cdot N_u \cdot \left(D + N_u\right) - D \cdot E \cdot \left(A \cdot C + B \cdot N_u\right)\right]^2}} = 0$$

4RST4B6R1



$N_1 = 1.01441$ $N_4 = 1.41390$

$N_2 = 3.35837$ $N_5 = 0.48429$

$N_3 = 2.76258$ $N_6 = 1.95653$

$R = 0.32983$

Unit. $AB := 1$ **Given.** $N_1 := 1.01441$ $N_2 := 3.35837$ $N_3 := 2.76258$

$N_4 := 1.41390$ $N_5 := .48429$ $N_6 := 1.95653$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2 \cdot C \cdot N_u \cdot \sqrt{A}}{\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot (2 \cdot C \cdot F + D \cdot E)} = 0.329837$$

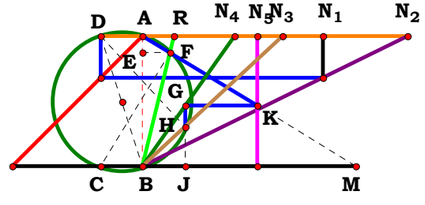
$$Num := \frac{2 \cdot C \cdot N_u \cdot \sqrt{A}}{\sqrt{\left(2 \cdot C \cdot N_u \cdot \sqrt{A}\right)^2}}$$

$$Den := \frac{\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot (2 \cdot C \cdot F + D \cdot E)}{\sqrt{\left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot (2 \cdot C \cdot F + D \cdot E)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A} \cdot C \cdot N_u \cdot \sqrt{\left[\sqrt{A} \cdot (2 \cdot C \cdot F + D \cdot E) + \sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]}\right]^2}}{\left[\sqrt{A} \cdot (2 \cdot C \cdot F + D \cdot E) + \sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]}\right] \cdot \sqrt{A \cdot C^2 \cdot N_u{}^2}} = 0$$

4RST4B6R2



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 1.07726$
$N_4 = 0.70683$
$N_5 = 0.88141$
$R = 0.24288$

Unit. $AB := 1$ **Given.** $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := 1.07726$

$N_4 := .70683$ $N_5 := .88141$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{E \cdot A \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left[D \cdot (A - B) + A \cdot N_u\right]\right] - A \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A - B)}{E \cdot (A - B) \cdot \left[A \cdot \left(C^2 - D \cdot C + {N_u}^2\right) + D \cdot N_u \cdot (A - B)\right] + A^2 \cdot N_u \cdot \left(C^2 + {N_u}^2\right)} = 0.242875$$

$$Num := \frac{E \cdot A \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left[D \cdot (A - B) + A \cdot N_u\right]\right] - A \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A - B)}{\sqrt{\left[E \cdot A \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left[D \cdot (A - B) + A \cdot N_u\right]\right] - A \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A - B)\right]^2}}$$

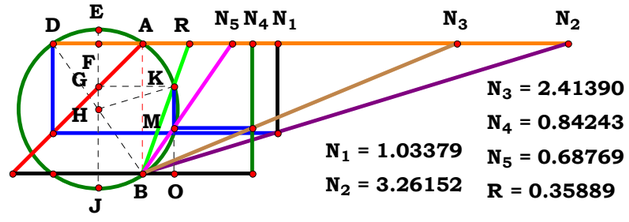
$$Den := \frac{E \cdot (A - B) \cdot \left[A \cdot \left(C^2 - D \cdot C + {N_u}^2\right) + D \cdot N_u \cdot (A - B)\right] + A^2 \cdot N_u \cdot \left(C^2 + {N_u}^2\right)}{\sqrt{\left[E \cdot (A - B) \cdot \left[A \cdot \left(C^2 - D \cdot C + {N_u}^2\right) + D \cdot N_u \cdot (A - B)\right] + A^2 \cdot N_u \cdot \left(C^2 + {N_u}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[A \cdot E \cdot \left[N_u \cdot \left[A \cdot N_u + D \cdot (A - B)\right] + A \cdot C \cdot (C - D)\right] - A \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A - B)\right] \cdot \sqrt{\left[E \cdot (A - B) \cdot \left[A \cdot \left(C^2 - D \cdot C + {N_u}^2\right) + D \cdot N_u \cdot (A - B)\right] + A^2 \cdot N_u \cdot \left(C^2 + {N_u}^2\right)\right]^2}}{\sqrt{\left[A \cdot E \cdot \left[N_u \cdot \left[A \cdot N_u + D \cdot (A - B)\right] + A \cdot C \cdot (C - D)\right] - A \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A - B)\right]^2} \cdot \left[E \cdot (A - B) \cdot \left[A \cdot \left(C^2 - D \cdot C + {N_u}^2\right) + D \cdot N_u \cdot (A - B)\right] + A^2 \cdot N_u \cdot \left(C^2 + {N_u}^2\right)\right]} = 0$$

4RST4B6R3



Unit. $AB := 1$ Given. $N_1 := 1.03379$ $N_2 := 3.26152$ $N_3 := 2.41390$

$N_4 := .84243$ $N_5 := .68769$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{2 \cdot C \cdot N_u \cdot \sqrt{A}}{\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E} = 0.358879$$

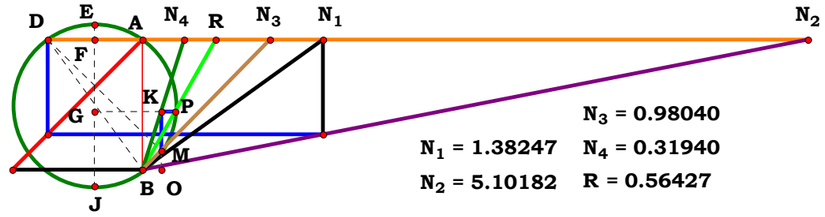
$$Num := \frac{2 \cdot C \cdot N_u \cdot \sqrt{A}}{\sqrt{\left(2 \cdot C \cdot N_u \cdot \sqrt{A}\right)^2}}$$

$$Den := \frac{\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E}{\sqrt{\left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A} \cdot C \cdot N_u \cdot \sqrt{\left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right]^2}}{\left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right] \cdot \sqrt{A \cdot C^2 \cdot N_u^2}} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 1.38247$ $N_2 := 5.10182$ $N_3 := .98040$ $N_4 := .31940$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{4\cdot D\cdot\left[A\cdot C-N_u\cdot(A-B)\right]\cdot\left[A\cdot\left(C^2-D\cdot C+N_u{}^2\right)+D\cdot N_u\cdot(A-B)\right]+\left(C^2+N_u{}^2\right)^2\cdot(A-B)^2}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)}{2\cdot D\cdot\left(A\cdot C-A\cdot N_u+B\cdot N_u\right)}=0.564269$$

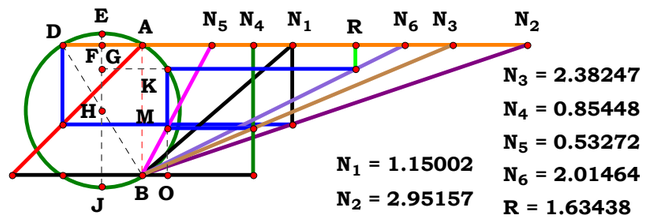
$$Num := \frac{\sqrt{4\cdot D\cdot\left[A\cdot C-N_u\cdot(A-B)\right]\cdot\left[A\cdot\left(C^2-D\cdot C+N_u{}^2\right)+D\cdot N_u\cdot(A-B)\right]+\left(C^2+N_u{}^2\right)^2\cdot(A-B)^2}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)}{\sqrt{\left[\sqrt{4\cdot D\cdot\left[A\cdot C-N_u\cdot(A-B)\right]\cdot\left[A\cdot\left(C^2-D\cdot C+N_u{}^2\right)+D\cdot N_u\cdot(A-B)\right]+\left(C^2+N_u{}^2\right)^2\cdot(A-B)^2}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)\right]^2}}$$

$$Den := \frac{2\cdot D\cdot\left(A\cdot C-A\cdot N_u+B\cdot N_u\right)}{\sqrt{\left[2\cdot D\cdot\left(A\cdot C-A\cdot N_u+B\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{D^2\cdot\left(A\cdot C-A\cdot N_u+B\cdot N_u\right)^2}\cdot\left[\sqrt{4\cdot D\cdot\left[A\cdot C-N_u\cdot(A-B)\right]\cdot\left[A\cdot\left(C^2-D\cdot C+N_u{}^2\right)+D\cdot N_u\cdot(A-B)\right]+\left(C^2+N_u{}^2\right)^2\cdot(A-B)^2}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)\right]}{D\cdot\sqrt{\left[\sqrt{4\cdot D\cdot\left[A\cdot C-N_u\cdot(A-B)\right]\cdot\left[A\cdot\left(C^2-D\cdot C+N_u{}^2\right)+D\cdot N_u\cdot(A-B)\right]+\left(C^2+N_u{}^2\right)^2\cdot(A-B)^2}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)\right]^2}\cdot\left(A\cdot C-A\cdot N_u+B\cdot N_u\right)}=0$$

4RST4B6R5



Unit. $AB := 1$ Given. $N_1 := 1.15002$ $N_2 := 2.95157$ $N_3 := 2.38247$

$N_4 := .85448$ $N_5 := .53272$ $N_6 := 2.01464$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right]}{2 \cdot F \cdot \sqrt{A} \cdot D \cdot E} = 1.634379$$

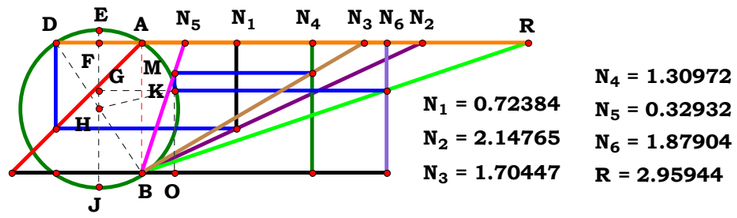
$$Num := \frac{N_u \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right]}{\sqrt{\left[N_u \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right]\right]^2}}$$

$$Den := \frac{2 \cdot F \cdot \sqrt{A} \cdot D \cdot E}{\sqrt{(2 \cdot F \cdot \sqrt{A} \cdot D \cdot E)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right] \cdot \sqrt{A \cdot D^2 \cdot E^2 \cdot F^2}}{\sqrt{A} \cdot D \cdot E \cdot F \cdot \sqrt{N_u^2 \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right]^2}} = 0$$

4RST4B6R6



$N_1 = 0.72384$
$N_2 = 2.14765$
$N_3 = 1.70447$
$N_4 = 1.30972$
$N_5 = 0.32932$
$N_6 = 1.87904$
$R = 2.95944$

Unit. $AB := 1$ Given. $N_1 := .72384$ $N_2 := 2.14765$ $N_3 := 1.70447$

$N_4 := 1.30972$ $N_5 := .32932$ $N_6 := 1.87904$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2 \cdot N_6 \cdot \sqrt{A} \cdot D}{\sqrt{A \cdot D^2 - 4 \cdot C \cdot N_5 \cdot \left[D \cdot (A - B) + A \cdot C \cdot N_5\right]} + \sqrt{A} \cdot D} = 2.959505$$

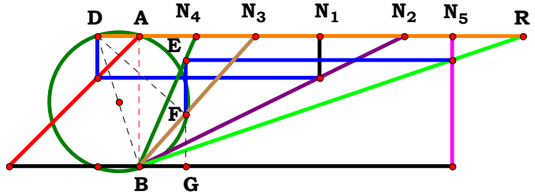
$$Num := \frac{2 \cdot N_6 \cdot \sqrt{A} \cdot D}{\sqrt{\left(2 \cdot N_6 \cdot \sqrt{A} \cdot D\right)^2}}$$

$$Den := \frac{\sqrt{A \cdot D^2 - 4 \cdot C \cdot N_5 \cdot \left[D \cdot (A - B) + A \cdot C \cdot N_5\right]} + \sqrt{A} \cdot D}{\sqrt{\left[\sqrt{A \cdot D^2 - 4 \cdot C \cdot N_5 \cdot \left[D \cdot (A - B) + A \cdot C \cdot N_5\right]} + \sqrt{A} \cdot D\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A} \cdot D \cdot N_6 \cdot \sqrt{\left[\sqrt{A \cdot D^2 - 4 \cdot C \cdot N_5 \cdot \left[D \cdot (A - B) + A \cdot C \cdot N_5\right]} + \sqrt{A} \cdot D\right]^2}}{\left[\sqrt{A \cdot D^2 - 4 \cdot C \cdot N_5 \cdot \left[D \cdot (A - B) + A \cdot C \cdot N_5\right]} + \sqrt{A} \cdot D\right] \cdot \sqrt{A \cdot D^2 \cdot N_6{}^2}} = 0$$

4RST4B6R7



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.89323$
$N_4 = 0.43563$
$N_5 = 2.40207$
$R = 2.94715$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .89323$ $N_4 := .43563$ $N_5 := 2.40207$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[A \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right]} = 2.947144$$

$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

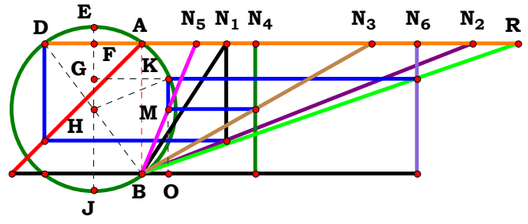
$$Den := \frac{E \cdot \left[A \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[E \cdot \left[A \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{E^2 \cdot \left[A \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right]^2} \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[A \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST4B6R8



$N_1 = 0.64635$
$N_2 = 2.53508$
$N_3 = 1.76258$
$N_4 = 0.87386$
$N_5 = 0.41649$
$N_6 = 2.11150$
$R = 2.88713$

Unit. $AB := 1$ Given. $N_1 := .64635$ $N_2 := 2.53508$ $N_3 := 1.76258$

$N_4 := .87386$ $N_5 := .41649$ $N_6 := 2.11150$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2 \cdot N_u \cdot \sqrt{A} \cdot D \cdot E}{F \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right]} = 2.887152$$

$$Num := \frac{2 \cdot N_u \cdot \sqrt{A} \cdot D \cdot E}{\sqrt{\left(2 \cdot N_u \cdot \sqrt{A} \cdot D \cdot E\right)^2}}$$

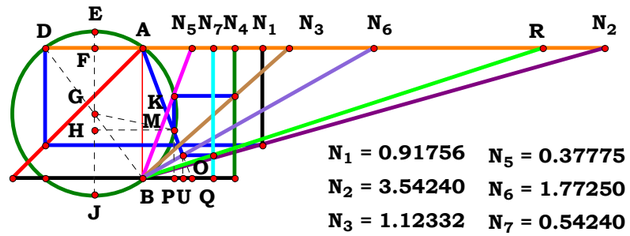
$$Den := \frac{F \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right]}{\sqrt{\left[F \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A} \cdot D \cdot E \cdot N_u \cdot \sqrt{F^2 \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right]^2}}{F \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot D \cdot E\right] \cdot \sqrt{A \cdot D^2 \cdot E^2 \cdot N_u^2}} = 0$$

4RST4B6R10



$N_1 = 0.91756$ $N_5 = 0.37775$
$N_2 = 3.54240$ $N_6 = 1.77250$
$N_3 = 1.12332$ $N_7 = 0.54240$
$N_4 = 0.70920$ $R = 3.07450$

Unit. $AB := 1$ **Given.** $N_1 := .91756$ $N_2 := 3.54240$ $N_3 := 1.12332$ $N_4 := .70920$

$N_5 := .37775$ $N_6 := 1.77250$ $N_7 := .54240$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.

$$\frac{N_u \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot (2 \cdot C \cdot F + D \cdot E)\right]}{2 \cdot C \cdot F \cdot G \cdot \sqrt{A}} = 3.074367$$

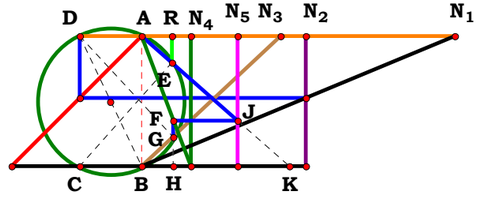
$$Num := \frac{N_u \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot (2 \cdot C \cdot F + D \cdot E)\right]}{\sqrt{\left[N_u \cdot \left[\sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]} + \sqrt{A} \cdot (2 \cdot C \cdot F + D \cdot E)\right]\right]^2}}$$

$$Den := \frac{2 \cdot C \cdot F \cdot G \cdot \sqrt{A}}{\sqrt{(2 \cdot C \cdot F \cdot G \cdot \sqrt{A})^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[\sqrt{A} \cdot (2 \cdot C \cdot F + D \cdot E) + \sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]}\right] \cdot \sqrt{A \cdot C^2 \cdot F^2 \cdot G^2}}{\sqrt{A} \cdot C \cdot F \cdot G \cdot \sqrt{N_u^2 \cdot \left[\sqrt{A} \cdot (2 \cdot C \cdot F + D \cdot E) + \sqrt{A \cdot D^2 \cdot E^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot C \cdot N_u + D \cdot E \cdot (A - B)\right]}\right]^2}} = 0$$

4RST5B1R0



$N_1 = 2.39948$
$N_2 = 1.25656$
$N_3 = 1.06757$
$N_4 = 0.37752$
$N_5 = 0.73612$
$R = 0.22832$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.25656$ $N_3 := 1.06757$

$N_4 := .37752$ $N_5 := .73612$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[N_u \cdot \left(C^2 + N_u^2\right) \cdot (A - B) + D \cdot E \cdot N_u \cdot (A - B) + B \cdot C \cdot D \cdot E\right]}{E^2 \cdot D^2 \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)^2 + B^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2} = 0.228316$$

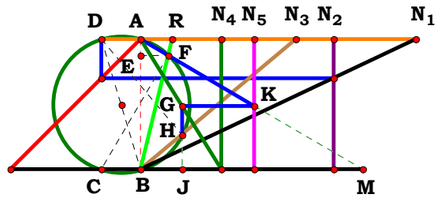
$$Num := \frac{B \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[N_u \cdot \left(C^2 + N_u^2\right) \cdot (A - B) + D \cdot E \cdot N_u \cdot (A - B) + B \cdot C \cdot D \cdot E\right]}{\sqrt{\left[B \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[N_u \cdot \left(C^2 + N_u^2\right) \cdot (A - B) + D \cdot E \cdot N_u \cdot (A - B) + B \cdot C \cdot D \cdot E\right]\right]^2}}$$

$$Den := \frac{E^2 \cdot D^2 \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)^2 + B^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2}{\sqrt{\left[E^2 \cdot D^2 \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)^2 + B^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \sqrt{\left[D^2 \cdot E^2 \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)^2 + B^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right]^2} \cdot \left[N_u \cdot \left(C^2 + N_u^2\right) \cdot (A - B) + D \cdot E \cdot N_u \cdot (A - B) + B \cdot C \cdot D \cdot E\right]}{\left[D^2 \cdot E^2 \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right)^2 + B^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right] \cdot \sqrt{B^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot \left[N_u \cdot \left(C^2 + N_u^2\right) \cdot (A - B) + D \cdot E \cdot N_u \cdot (A - B) + B \cdot C \cdot D \cdot E\right]^2}} = 0$$

4RST5B1R1



$N_1 = 2.10891$
$N_2 = 1.47933$
$N_3 = 1.19349$
$N_4 = 0.61966$
$N_5 = 0.87172$
$R = 0.24517$

Unit. $AB := 1$ Given. $N_1 := 2.10891$ $N_2 := 1.47933$ $N_3 := 1.19349$

$N_4 := .61966$ $N_5 := .87172$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B\cdot\left[E\cdot D\cdot\left[B\cdot C+N_u\cdot(A-B)\right]+N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A-B)\right]}{B^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)-E\cdot D\cdot(A-B)\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)}=0.245164$$

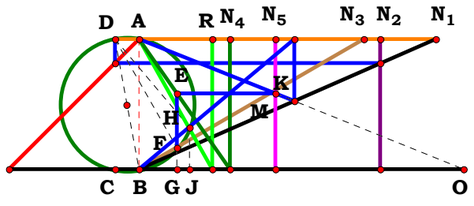
$$Num := \frac{B\cdot\left[E\cdot D\cdot\left[B\cdot C+N_u\cdot(A-B)\right]+N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A-B)\right]}{\sqrt{\left[B\cdot\left[E\cdot D\cdot\left[B\cdot C+N_u\cdot(A-B)\right]+N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A-B)\right]\right]^2}}$$

$$Den := \frac{B^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)-E\cdot D\cdot(A-B)\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)}{\sqrt{\left[B^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)-E\cdot D\cdot(A-B)\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{B\cdot\left[N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A-B)+D\cdot E\cdot\left[B\cdot C+N_u\cdot(A-B)\right]\right]\cdot\sqrt{\left[B^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)-D\cdot E\cdot(A-B)\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)\right]^2}}{\left[B^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)-D\cdot E\cdot(A-B)\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)\right]\cdot\sqrt{B^2\cdot\left[N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A-B)+D\cdot E\cdot\left[B\cdot C+N_u\cdot(A-B)\right]\right]^2}}=0$$

4RST5B1R2



$N_1 = 2.27357$
$N_2 = 1.84739$
$N_3 = 1.72621$
$N_4 = 0.69715$
$N_5 = 1.04606$
$R = 0.56545$

Unit. $AB := 1$ Given. $N_1 := 2.27357$ $N_2 := 1.84739$ $N_3 := 1.72621$

$N_4 := .69715$ $N_5 := 1.04606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{E \cdot B \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] + B \cdot \left(C^2 + {N_u}^2\right) \cdot \left[A \cdot B + N_u \cdot (A - B)\right]}{B \cdot \left(C^2 + {N_u}^2\right) \cdot \left(A \cdot B - A^2 + B \cdot N_u\right) - E \cdot D \cdot (A - B) \cdot \left[B \cdot C + N_u \cdot (A - B)\right]} = 0.565442$$

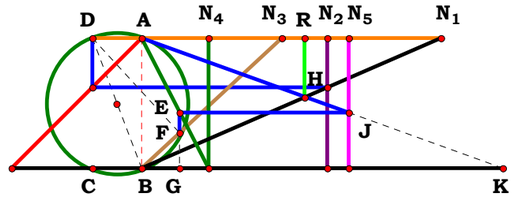
$$Num := \frac{E \cdot B \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] + B \cdot \left(C^2 + {N_u}^2\right) \cdot \left[A \cdot B + N_u \cdot (A - B)\right]}{\sqrt{\left[E \cdot B \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] + B \cdot \left(C^2 + {N_u}^2\right) \cdot \left[A \cdot B + N_u \cdot (A - B)\right]\right]^2}}$$

$$Den := \frac{B \cdot \left(C^2 + {N_u}^2\right) \cdot \left(A \cdot B - A^2 + B \cdot N_u\right) - E \cdot D \cdot (A - B) \cdot \left[B \cdot C + N_u \cdot (A - B)\right]}{\sqrt{\left[B \cdot \left(C^2 + {N_u}^2\right) \cdot \left(A \cdot B - A^2 + B \cdot N_u\right) - E \cdot D \cdot (A - B) \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left[B \cdot \left(C^2 + {N_u}^2\right) \cdot \left(B \cdot A - A^2 + B \cdot N_u\right) - D \cdot E \cdot \left[B \cdot C + N_u \cdot (A - B)\right] \cdot (A - B)\right]^2} \cdot \left[B \cdot \left[A \cdot B + N_u \cdot (A - B)\right] \cdot \left(C^2 + {N_u}^2\right) + B \cdot D \cdot E \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]}{\left[B \cdot \left(C^2 + {N_u}^2\right) \cdot \left(B \cdot A - A^2 + B \cdot N_u\right) - D \cdot E \cdot \left[B \cdot C + N_u \cdot (A - B)\right] \cdot (A - B)\right] \cdot \sqrt{\left[B \cdot \left[A \cdot B + N_u \cdot (A - B)\right] \cdot \left(C^2 + {N_u}^2\right) + B \cdot D \cdot E \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]^2}} = 0$$

4RST5B1R3



$N_1 = 2.29294$
$N_2 = 1.42122$
$N_3 = 1.07726$
$N_4 = 0.51312$
$N_5 = 1.58847$
$R = 1.25419$

Unit. $AB := 1$ Given. $N_1 := 2.29294$ $N_2 := 1.42122$ $N_3 := 1.07726$

$N_4 := .51312$ $N_5 := 1.58847$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{E \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] + A \cdot B \cdot \left(C^2 + N_u{}^2\right)} = 1.25419$$

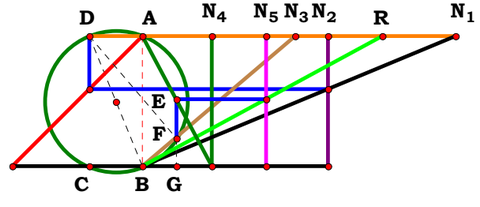
$$Num := \frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{E \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] + A \cdot B \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[E \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] + A \cdot B \cdot \left(C^2 + N_u{}^2\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{\left[A \cdot B \cdot \left(C^2 + N_u{}^2\right) + D \cdot E \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]^2}}{\left[A \cdot B \cdot \left(C^2 + N_u{}^2\right) + D \cdot E \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right] \cdot \sqrt{B^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST5B1R4



$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 1.17412$
$N_4 = 0.53249$
$N_5 = 0.94921$
$R = 1.83694$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := 1.17412$

$N_4 := .53249$ $N_5 := .94921$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[B \cdot C \cdot (C - D) + B \cdot N_u{}^2 - D \cdot N_u \cdot (A - B)\right]} = 1.836947$$

$$Num := \frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

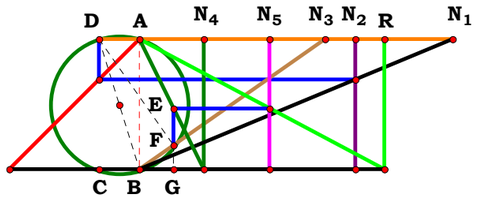
$$Den := \frac{E \cdot \left[B \cdot C \cdot (C - D) + B \cdot N_u{}^2 - D \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[E \cdot \left[B \cdot C \cdot (C - D) + B \cdot N_u{}^2 - D \cdot N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{E^2 \cdot \left[B \cdot N_u{}^2 - D \cdot (A - B) \cdot N_u + B \cdot C \cdot (C - D)\right]^2}}{E \cdot \left[B \cdot N_u{}^2 - D \cdot (A - B) \cdot N_u + B \cdot C \cdot (C - D)\right] \cdot \sqrt{B^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST5B1R5



$N_1 = 2.39948$
$N_2 = 1.65368$
$N_3 = 1.42595$
$N_4 = 0.49375$
$N_5 = 0.99764$
$R = 1.88192$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.65368$ $N_3 := 1.42595$

$N_4 := .49375$ $N_5 := .99764$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[B \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]} = 1.881938$$

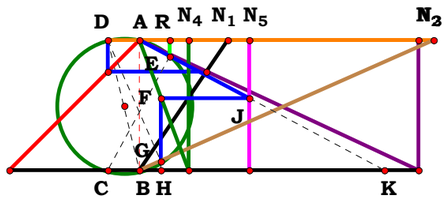
$$Num := \frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{E \cdot \left[B \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[E \cdot \left[B \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \sqrt{E^2 \cdot \left[B \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]^2} \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[B \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right] \cdot \sqrt{B^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$



$N_1 = 0.67541$
$N_2 = 2.13797$
$N_3 = 2.25892$
$N_4 = 0.37752$
$N_5 = 0.84266$
$R = 0.22786$

Unit. $AB := 1$ Given. $N_1 := .67541$ $N_2 := 2.13797$ $N_3 := 2.25892$

$N_4 := .37752$ $N_5 := .84266$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A+B) \cdot \left[E \cdot D \cdot \left[C \cdot (A+B) - B \cdot N_u\right] - \left[B \cdot N_u \cdot \left(C^2 + N_u^2\right)\right]\right]}{E^2 \cdot D^2 \cdot \left[C \cdot (A+B) - B \cdot N_u\right]^2 + N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2} = 0.227861$$

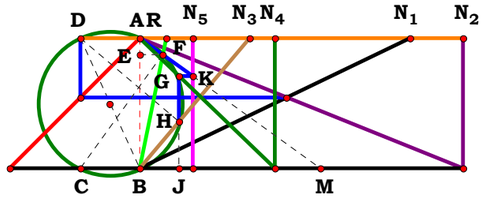
$$Num := \frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A+B) \cdot \left[E \cdot D \cdot \left[C \cdot (A+B) - B \cdot N_u\right] - \left[B \cdot N_u \cdot \left(C^2 + N_u^2\right)\right]\right]}{\sqrt{\left[N_u \cdot \left(C^2 + N_u^2\right) \cdot (A+B) \cdot \left[E \cdot D \cdot \left[C \cdot (A+B) - B \cdot N_u\right] - \left[B \cdot N_u \cdot \left(C^2 + N_u^2\right)\right]\right]\right]^2}}$$

$$Den := \frac{E^2 \cdot D^2 \cdot \left[C \cdot (A+B) - B \cdot N_u\right]^2 + N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2}{\sqrt{\left[E^2 \cdot D^2 \cdot \left[C \cdot (A+B) - B \cdot N_u\right]^2 + N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A+B) \cdot \sqrt{\left[N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2 + D^2 \cdot E^2 \cdot \left[C \cdot (A+B) - B \cdot N_u\right]^2\right]^2} \cdot \left[E \cdot D \cdot \left[C \cdot (A+B) - B \cdot N_u\right] - \left[B \cdot N_u \cdot \left(C^2 + N_u^2\right)\right]\right]}{\left[N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2 + D^2 \cdot E^2 \cdot \left[C \cdot (A+B) - B \cdot N_u\right]^2\right] \cdot \sqrt{N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2 \cdot \left[E \cdot D \cdot \left[C \cdot (A+B) - B \cdot N_u\right] - \left[B \cdot N_u \cdot \left(C^2 + N_u^2\right)\right]\right]^2}} = 0$$

4RST5B3R1



$N_1 = 2.07016$
$N_2 = 2.47697$
$N_3 = 0.84480$
$N_4 = 1.03615$
$N_5 = 0.40680$
$R = 0.19919$

Unit. $AB := 1$ Given. $N_1 := 2.07016$ $N_2 := 2.47697$ $N_3 := .84480$

$N_4 := 1.03615$ $N_5 := .40680$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]}{E\cdot B\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]+N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2}=0.199193$$

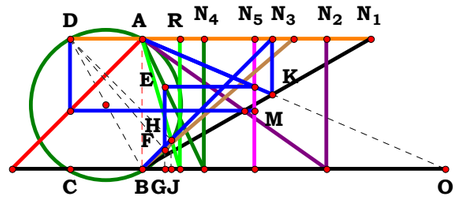
$$Num := \frac{(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]}{\sqrt{\left[(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]\right]^2}}$$

$$Den := \frac{E\cdot B\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]+N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2}{\sqrt{\left[E\cdot B\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]+N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{(A+B)\cdot\sqrt{\left[N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2+B\cdot D\cdot E\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]^2}\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]}{\sqrt{(A+B)^2\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]^2}\cdot\left[N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2+B\cdot D\cdot E\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]}=0$$

4RST5B3R2



$N_1 = 1.75053$
$N_2 = 1.41153$
$N_3 = 1.16443$
$N_4 = 0.47437$
$N_5 = 0.86203$
$R = 0.28775$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := 1.41153$ $N_3 := 1.16443$

$N_4 := .47437$ $N_5 := .86203$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]+\left(C^2+N_u{}^2\right)\cdot\left[A^2+B\cdot(A-N_u)\right]\right]}{E\cdot B\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]+\left(C^2+N_u{}^2\right)\cdot(A+B)\cdot\left[A\cdot B+N_u\cdot(A+B)\right]}=0.287754$$

$$Num := \frac{(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]+\left(C^2+N_u{}^2\right)\cdot\left[A^2+B\cdot(A-N_u)\right]\right]}{\sqrt{\left[(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]+\left(C^2+N_u{}^2\right)\cdot\left[A^2+B\cdot(A-N_u)\right]\right]\right]^2}}$$

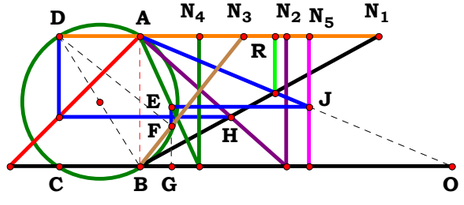
$$Den := \frac{E\cdot B\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]+\left(C^2+N_u{}^2\right)\cdot(A+B)\cdot\left[A\cdot B+N_u\cdot(A+B)\right]}{\sqrt{\left[E\cdot B\cdot D\cdot\left[C\cdot(A+B)-B\cdot N_u\right]+\left(C^2+N_u{}^2\right)\cdot(A+B)\cdot\left[A\cdot B+N_u\cdot(A+B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{\left[\left(C^2+N_u{}^2\right)\cdot(A+B)\cdot\left[N_u\cdot(A+B)+A\cdot B\right]+B\cdot D\cdot E\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]^2}\cdot(A+B)\cdot\left[\left(C^2+N_u{}^2\right)\cdot\left[A^2+B\cdot(A-N_u)\right]+D\cdot E\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]}{\sqrt{(A+B)^2\cdot\left[\left(C^2+N_u{}^2\right)\cdot\left[A^2+B\cdot(A-N_u)\right]+D\cdot E\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]^2\cdot\left[\left(C^2+N_u{}^2\right)\cdot(A+B)\cdot\left[N_u\cdot(A+B)+A\cdot B\right]+B\cdot D\cdot E\cdot\left[C\cdot(A+B)-B\cdot N_u\right]\right]}}=0$$

4RST5B3R3



$N_1 = 1.82802$
$N_2 = 1.12096$
$N_3 = 0.79637$
$N_4 = 0.45500$
$N_5 = 1.29790$
$R = 1.03641$

Unit. $AB := 1$ Given. $N_1 := 1.82802$ $N_2 := 1.12096$ $N_3 := .79637$

$N_4 := .45500$ $N_5 := 1.29790$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{E \cdot D \cdot \left[C \cdot (A + B) - B \cdot N_u\right] + A \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)} = 1.036407$$

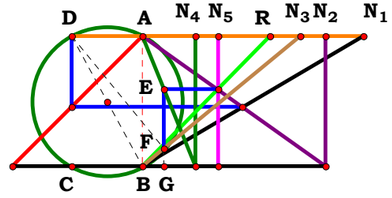
$$Num := \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{E \cdot D \cdot \left[C \cdot (A + B) - B \cdot N_u\right] + A \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[E \cdot D \cdot \left[C \cdot (A + B) - B \cdot N_u\right] + A \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[A \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B) + D \cdot E \cdot \left[C \cdot (A + B) - B \cdot N_u\right]\right]^2} \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\left[A \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B) + D \cdot E \cdot \left[C \cdot (A + B) - B \cdot N_u\right]\right] \cdot \sqrt{N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$



$N_1 = 1.69242$
$N_2 = 1.40185$
$N_3 = 1.21286$
$N_4 = 0.40657$
$N_5 = 0.58115$
$R = 0.97899$

Unit. $AB := 1$ Given. $N_1 := 1.69242$ $N_2 := 1.40185$ $N_3 := 1.21286$

$N_4 := .40657$ $N_5 := .58115$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B)}{E \cdot \left[C^2 \cdot (A + B) + {N_u}^2 \cdot (A + B) - D \cdot \left[C \cdot (A + B) - B \cdot N_u\right]\right]} = 0.979006$$

$$Num := \frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B)\right]^2}}$$

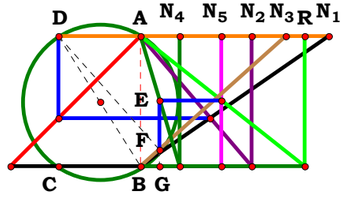
$$Den := \frac{E \cdot \left[C^2 \cdot (A + B) + {N_u}^2 \cdot (A + B) - D \cdot \left[C \cdot (A + B) - B \cdot N_u\right]\right]}{\sqrt{\left[E \cdot \left[C^2 \cdot (A + B) + {N_u}^2 \cdot (A + B) - D \cdot \left[C \cdot (A + B) - B \cdot N_u\right]\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A + B) \cdot \sqrt{E^2 \cdot \left[C^2 \cdot (A + B) - D \cdot \left[C \cdot (A + B) - B \cdot N_u\right] + {N_u}^2 \cdot (A + B)\right]^2}}{E \cdot \left[C^2 \cdot (A + B) - D \cdot \left[C \cdot (A + B) - B \cdot N_u\right] + {N_u}^2 \cdot (A + B)\right] \cdot \sqrt{{N_u}^2 \cdot \left(C^2 + {N_u}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST5B3R5



$N_1 = 1.44059$
$N_2 = 0.84976$
$N_3 = 1.11600$
$N_4 = 0.30003$
$N_5 = 0.61989$
$R = 1.25552$

Unit. $AB := 1$ Given. $N_1 := 1.44059$ $N_2 := .84976$ $N_3 := 1.11600$

$N_4 := .30003$ $N_5 := .61989$

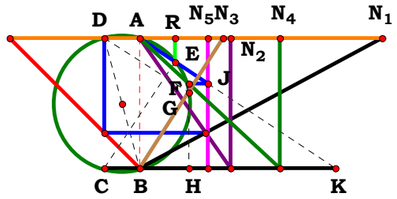
$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{D \cdot E \cdot \left[C \cdot (A + B) - B \cdot N_u\right]} = 1.255517 \qquad Num := \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)\right]^2}} \qquad Den := \frac{D \cdot E \cdot \left[C \cdot (A + B) - B \cdot N_u\right]}{\sqrt{\left[D \cdot E \cdot \left[C \cdot (A + B) - B \cdot N_u\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{D^2 \cdot E^2 \cdot \left[C \cdot (A + B) - B \cdot N_u\right]^2}}{D \cdot E \cdot \left[C \cdot (A + B) - B \cdot N_u\right] \cdot \sqrt{N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$



$N_1 = 1.85708$
$N_2 = 0.69478$
$N_3 = 0.64140$
$N_4 = 1.07489$
$N_5 = 0.52303$
$R = 0.27327$

Unit. $AB := 1$ Given. $N_1 := 1.85708$ $N_2 := .69478$ $N_3 := .64140$

$N_4 := 1.07489$ $N_5 := .52303$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A+B) \cdot \left[E \cdot D \cdot \left[C \cdot (A+B) - A \cdot N_u\right] - \left[A \cdot N_u \cdot \left(C^2 + N_u^2\right)\right]\right]}{E^2 \cdot D^2 \cdot \left[C \cdot (A+B) - A \cdot N_u\right]^2 + N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2} = 0.273271$$

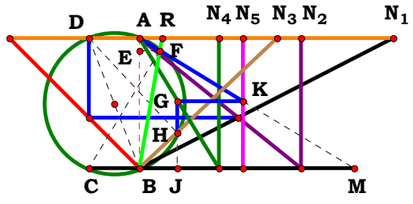
$$Num := \frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A+B) \cdot \left[E \cdot D \cdot \left[C \cdot (A+B) - A \cdot N_u\right] - \left[A \cdot N_u \cdot \left(C^2 + N_u^2\right)\right]\right]}{\sqrt{\left[N_u \cdot \left(C^2 + N_u^2\right) \cdot (A+B) \cdot \left[E \cdot D \cdot \left[C \cdot (A+B) - A \cdot N_u\right] - \left[A \cdot N_u \cdot \left(C^2 + N_u^2\right)\right]\right]\right]^2}}$$

$$Den := \frac{E^2 \cdot D^2 \cdot \left[C \cdot (A+B) - A \cdot N_u\right]^2 + N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2}{\sqrt{\left[E^2 \cdot D^2 \cdot \left[C \cdot (A+B) - A \cdot N_u\right]^2 + N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A+B) \cdot \sqrt{\left[N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2 + D^2 \cdot E^2 \cdot \left[C \cdot (A+B) - A \cdot N_u\right]^2\right]^2} \cdot \left[E \cdot D \cdot \left[C \cdot (A+B) - A \cdot N_u\right] - \left[A \cdot N_u \cdot \left(C^2 + N_u^2\right)\right]\right]}{\left[N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2 + D^2 \cdot E^2 \cdot \left[C \cdot (A+B) - A \cdot N_u\right]^2\right] \cdot \sqrt{N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A+B)^2 \cdot \left[E \cdot D \cdot \left[C \cdot (A+B) - A \cdot N_u\right] - \left[A \cdot N_u \cdot \left(C^2 + N_u^2\right)\right]\right]^2}} = 0$$

4RST5B4R1



$N_1 = 1.94425$
$N_2 = 1.23719$
$N_3 = 1.05789$
$N_4 = 0.60998$
$N_5 = 0.79423$
$R = 0.17611$

Unit. $AB := 1$ Given. $N_1 := 1.94425$ $N_2 := 1.23719$ $N_3 := 1.05789$

$N_4 := .60998$ $N_5 := .79423$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]-\left[A\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]}{E\cdot A\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]+N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2}=0.17611$$

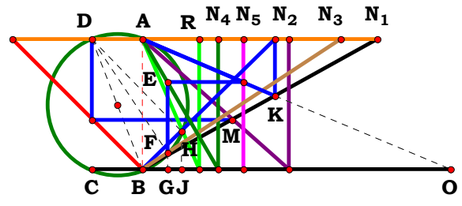
$$Num := \frac{(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]-\left[A\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]}{\sqrt{\left[(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]-\left[A\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]\right]^2}}$$

$$Den := \frac{E\cdot A\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]+N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2}{\sqrt{\left[E\cdot A\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]+N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{(A+B)\cdot\sqrt{\left[N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2+A\cdot D\cdot E\cdot\left[C\cdot(A+B)-A\cdot N_u\right]\right]^2}\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]-\left[A\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]}{\sqrt{(A+B)^2\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]-\left[A\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]^2}\cdot\left[N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2+A\cdot D\cdot E\cdot\left[C\cdot(A+B)-A\cdot N_u\right]\right]}=0$$

4RST5B4R2



$N_1 = 1.79896$
$N_2 = 1.12096$
$N_3 = 1.52280$
$N_4 = 0.58092$
$N_5 = 0.77486$
$R = 0.43271$

Unit. $AB := 1$ **Given.** $N_1 := 1.79896$ $N_2 := 1.12096$ $N_3 := 1.52280$ $N_4 := .58092$ $N_5 := .77486$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]+A\cdot\left(C^2+{N_u}^2\right)\cdot\left(A+B-N_u\right)\right]}{E\cdot A\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]+(A+B)\cdot\left[A^2+N_u\cdot(A+B)\right]\cdot\left(C^2+{N_u}^2\right)}=0.432714$$

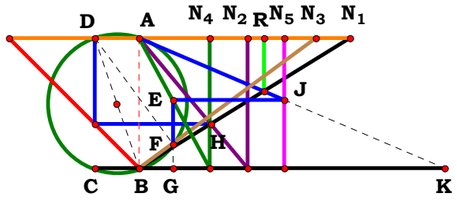
$$Num := \frac{(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]+A\cdot\left(C^2+{N_u}^2\right)\cdot\left(A+B-N_u\right)\right]}{\sqrt{\left[(A+B)\cdot\left[E\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]+A\cdot\left(C^2+{N_u}^2\right)\cdot\left(A+B-N_u\right)\right]\right]^2}}$$

$$Den := \frac{E\cdot A\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]+(A+B)\cdot\left[A^2+N_u\cdot(A+B)\right]\cdot\left(C^2+{N_u}^2\right)}{\sqrt{\left[E\cdot A\cdot D\cdot\left[C\cdot(A+B)-A\cdot N_u\right]+(A+B)\cdot\left[A^2+N_u\cdot(A+B)\right]\cdot\left(C^2+{N_u}^2\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[D\cdot E\cdot\left[C\cdot(A+B)-A\cdot N_u\right]+A\cdot\left(C^2+{N_u}^2\right)\cdot\left(A+B-N_u\right)\right]\cdot(A+B)\cdot\sqrt{\left[\left[N_u\cdot(A+B)+A^2\right]\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)+A\cdot D\cdot E\cdot\left[C\cdot(A+B)-A\cdot N_u\right]\right]^2}}{\left[\left[N_u\cdot(A+B)+A^2\right]\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)+A\cdot D\cdot E\cdot\left[C\cdot(A+B)-A\cdot N_u\right]\right]\cdot\sqrt{\left[D\cdot E\cdot\left[C\cdot(A+B)-A\cdot N_u\right]+A\cdot\left(C^2+{N_u}^2\right)\cdot\left(A+B-N_u\right)\right]^2\cdot(A+B)^2}}=0$$

4RST5B4R3



$N_1 = 1.61493$
$N_2 = 0.83038$
$N_3 = 1.35815$
$N_4 = 0.54218$
$N_5 = 1.11387$
$R = 0.95676$

Unit. $AB := 1$ Given. $N_1 := 1.61493$ $N_2 := .83038$ $N_3 := 1.35815$

$N_4 := .54218$ $N_5 := 1.11387$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{E \cdot D \cdot \left[C \cdot (A + B) - A \cdot N_u\right] + A \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)} = 0.956762$$

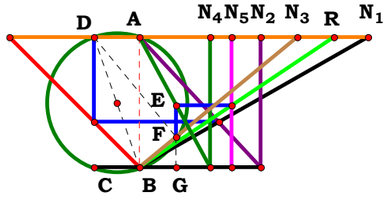
$$Num := \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{E \cdot D \cdot \left[C \cdot (A + B) - A \cdot N_u\right] + A \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[E \cdot D \cdot \left[C \cdot (A + B) - A \cdot N_u\right] + A \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[A \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B) + D \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]^2} \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\left[A \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B) + D \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right] \cdot \sqrt{N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST5B4R4



$N_1 = 1.75053$
$N_2 = 0.92724$
$N_3 = 1.21286$
$N_4 = 0.54218$
$N_5 = 0.70706$
$R = 1.48884$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := .92724$ $N_3 := 1.21228$

$N_4 := .54218$ $N_5 := .70706$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{E \cdot \left[C^2 \cdot (A + B) + N_u{}^2 \cdot (A + B) - D \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]} = 1.489541$$

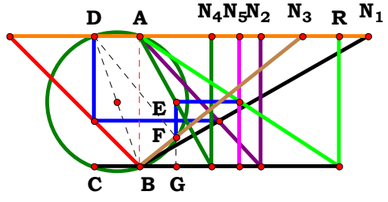
$$Num := \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{E \cdot \left[C^2 \cdot (A + B) + N_u{}^2 \cdot (A + B) - D \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]}{\sqrt{\left[E \cdot \left[C^2 \cdot (A + B) + N_u{}^2 \cdot (A + B) - D \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{E^2 \cdot \left[C^2 \cdot (A + B) - D \cdot \left[C \cdot (A + B) - A \cdot N_u\right] + N_u{}^2 \cdot (A + B)\right]^2}}{E \cdot \left[C^2 \cdot (A + B) - D \cdot \left[C \cdot (A + B) - A \cdot N_u\right] + N_u{}^2 \cdot (A + B)\right] \cdot \sqrt{N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST5B4R5



$N_1 = 1.75053$
$N_2 = 0.92724$
$N_3 = 1.25160$
$N_4 = 0.55186$
$N_5 = 0.76518$
$R = 1.52823$

Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := .92724$ $N_3 := 1.25160$

$N_4 := .55186$ $N_5 := .76518$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{D \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right]} = 1.52823$$

$$Num := \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

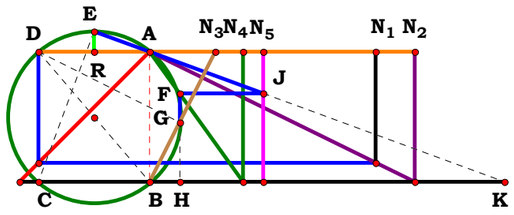
$$Den := \frac{D \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right]}{\sqrt{\left[D \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{D^2 \cdot E^2 \cdot \left[C \cdot (A + B) - A \cdot N_u\right]^2}}{D \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right] \cdot \sqrt{N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST5B5R0



$N_1 = 1.73116$
$N_2 = 2.03142$
$N_3 = 0.50580$
$N_4 = 0.71652$
$N_5 = 0.87172$
$R = -0.42774$

Unit. $AB := 1$ Given. $N_1 := 1.73116$ $N_2 := 2.03142$ $N_3 := .50580$ $N_4 := .71652$ $N_5 := .87172$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \left[E \cdot D \cdot \left(A \cdot C - B \cdot N_u\right) - \left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]\right]}{E^2 \cdot D^2 \cdot \left(A \cdot C - B \cdot N_u\right)^2 + A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2} = -0.427738$$

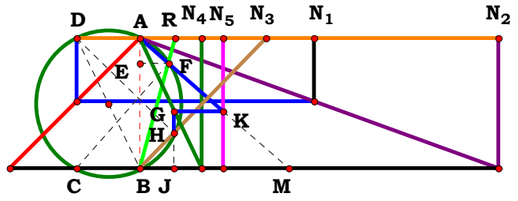
$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \left[E \cdot D \cdot \left(A \cdot C - B \cdot N_u\right) - \left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]\right]}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \left[E \cdot D \cdot \left(A \cdot C - B \cdot N_u\right) - \left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]\right]\right]^2}}$$

$$Den := \frac{E^2 \cdot D^2 \cdot \left(A \cdot C - B \cdot N_u\right)^2 + A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}{\sqrt{\left[E^2 \cdot D^2 \cdot \left(A \cdot C - B \cdot N_u\right)^2 + A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = -1$ $Den = 1$ $L = -1$

$$L - \frac{A \cdot N_u \cdot \left[E \cdot D \cdot \left(A \cdot C - B \cdot N_u\right) - \left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]\right] \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{\left[D^2 \cdot E^2 \cdot \left(A \cdot C - B \cdot N_u\right)^2 + A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2\right]^2}}{\left[D^2 \cdot E^2 \cdot \left(A \cdot C - B \cdot N_u\right)^2 + A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left[E \cdot D \cdot \left(A \cdot C - B \cdot N_u\right) - \left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]\right]^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST5B5R1



$N_1 = 1.33405$
$N_2 = 2.74817$
$N_3 = 0.97071$
$N_4 = 0.47437$
$N_5 = 0.63926$
$R = 0.27129$

Unit. $AB := 1$ Given. $N_1 := 1.33405$ $N_2 := 2.74817$ $N_3 := .97071$

$N_4 := .47437$ $N_5 := .63926$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

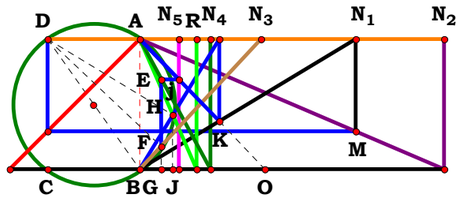
$$\frac{A\cdot\left[E\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]}{E\cdot B\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)+A^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)}=0.271291$$

$$Num := \frac{A\cdot\left[E\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]}{\sqrt{\left[A\cdot\left[E\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]\right]^2}}$$

$$Den := \frac{E\cdot B\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)+A^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)}{\sqrt{\left[E\cdot B\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)+A^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{A\cdot\left[E\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]\cdot\sqrt{\left[A^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)+B\cdot D\cdot E\cdot\left(A\cdot C-B\cdot N_u\right)\right]^2}}{\sqrt{A^2\cdot\left[E\cdot D\cdot\left(A\cdot C-B\cdot N_u\right)-\left[B\cdot N_u\cdot\left(C^2+{N_u}^2\right)\right]\right]^2}\cdot\left[A^2\cdot N_u\cdot\left(C^2+{N_u}^2\right)+B\cdot D\cdot E\cdot\left(A\cdot C-B\cdot N_u\right)\right]}=0$$



$N_1 = 1.65368$
$N_2 = 2.33168$
$N_3 = 0.93197$
$N_4 = 0.54218$
$N_5 = 0.30026$
$R = 0.43139$

Unit. $AB := 1$ **Given.** $N_1 := 1.65368$ $N_2 := 2.33168$ $N_3 := .93197$

$N_4 := .54218$ $N_5 := .30026$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{E \cdot A \cdot D \cdot (A \cdot C - B \cdot N_u) + A \cdot (C^2 + N_u^2) \cdot (A^2 - B \cdot N_u)}{E \cdot B \cdot D \cdot (A \cdot C - B \cdot N_u) + A^2 \cdot (C^2 + N_u^2) \cdot (B + N_u)} = 0.431384$$

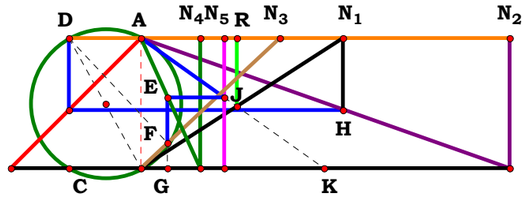
$$Num := \frac{E \cdot A \cdot D \cdot (A \cdot C - B \cdot N_u) + A \cdot (C^2 + N_u^2) \cdot (A^2 - B \cdot N_u)}{\sqrt{\left[E \cdot A \cdot D \cdot (A \cdot C - B \cdot N_u) + A \cdot (C^2 + N_u^2) \cdot (A^2 - B \cdot N_u)\right]^2}}$$

$$Den := \frac{E \cdot B \cdot D \cdot (A \cdot C - B \cdot N_u) + A^2 \cdot (C^2 + N_u^2) \cdot (B + N_u)}{\sqrt{\left[E \cdot B \cdot D \cdot (A \cdot C - B \cdot N_u) + A^2 \cdot (C^2 + N_u^2) \cdot (B + N_u)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left[A^2 \cdot (C^2 + N_u^2) \cdot (B + N_u) + B \cdot D \cdot E \cdot (A \cdot C - B \cdot N_u)\right]^2} \cdot \left[A \cdot (C^2 + N_u^2) \cdot (A^2 - B \cdot N_u) + A \cdot D \cdot E \cdot (A \cdot C - B \cdot N_u)\right]}{\left[A^2 \cdot (C^2 + N_u^2) \cdot (B + N_u) + B \cdot D \cdot E \cdot (A \cdot C - B \cdot N_u)\right] \cdot \sqrt{\left[A \cdot (C^2 + N_u^2) \cdot (A^2 - B \cdot N_u) + A \cdot D \cdot E \cdot (A \cdot C - B \cdot N_u)\right]^2}} = 0$$

4RST5B5R3



$N_1 = 1.54713$
$N_2 = 2.82566$
$N_3 = 1.06757$
$N_4 = 0.45500$
$N_5 = 0.63926$
$R = 0.73582$

Unit. $AB := 1$ Given. $N_1 := 1.54713$ $N_2 := 2.82566$ $N_3 := 1.06757$

$N_4 := .455$ $N_5 := .63926$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{A^2 \cdot \left(C^2 + N_u{}^2\right) + D \cdot E \cdot \left(A \cdot C - B \cdot N_u\right)} = 0.735811$$

$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

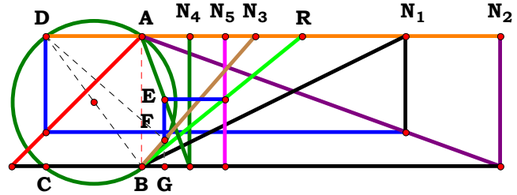
$$Den := \frac{A^2 \cdot \left(C^2 + N_u{}^2\right) + D \cdot E \cdot \left(A \cdot C - B \cdot N_u\right)}{\sqrt{\left[A^2 \cdot \left(C^2 + N_u{}^2\right) + D \cdot E \cdot \left(A \cdot C - B \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{\left[A^2 \cdot \left(C^2 + N_u{}^2\right) + D \cdot E \cdot \left(A \cdot C - B \cdot N_u\right)\right]^2}}{\left[A^2 \cdot \left(C^2 + N_u{}^2\right) + D \cdot E \cdot \left(A \cdot C - B \cdot N_u\right)\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST5B5R4



$N_1 = 2.02174$
$N_2 = 2.74817$
$N_3 = 0.87386$
$N_4 = 0.36783$
$N_5 = 0.63926$
$R = 1.23191$

Unit. $AB := 1$ Given. $N_1 := 2.02174$ $N_2 := 2.74817$ $N_3 := .87386$

$N_4 := .36783$ $N_5 := .63926$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]} = 1.231892$$

$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

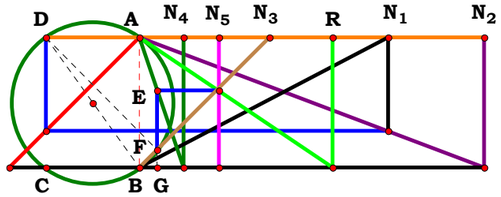
$$Den := \frac{E \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]}{\sqrt{\left[E \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{E^2 \cdot \left[N_u \cdot \left(B \cdot D + A \cdot N_u\right) + A \cdot C \cdot (C - D)\right]^2} \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[N_u \cdot \left(B \cdot D + A \cdot N_u\right) + A \cdot C \cdot (C - D)\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST5B5R5



$N_1 = 1.90551$
$N_2 = 2.64163$
$N_3 = 0.99977$
$N_4 = 0.33877$
$N_5 = 0.61020$
$R = 1.48279$

Unit. $AB := 1$ Given. $N_1 := 1.90551$ $N_2 := 2.64163$ $N_3 := .99977$

$N_4 := .33877$ $N_5 := .61020$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left(A \cdot C \cdot D - B \cdot D \cdot N_u\right)} = 1.482764$$

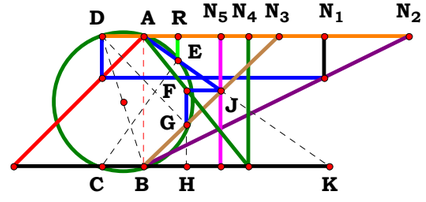
$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{E \cdot \left(A \cdot C \cdot D - B \cdot D \cdot N_u\right)}{\sqrt{\left[E \cdot \left(A \cdot C \cdot D - B \cdot D \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{E^2 \cdot \left(A \cdot C \cdot D - B \cdot D \cdot N_u\right)^2} \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left(A \cdot C \cdot D - B \cdot D \cdot N_u\right) \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 1.03851$
$N_4 = 0.80369$
$N_5 = 0.59083$
$R = 0.25675$

Unit. $AB := 1$ **Given.** $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := 1.03851$ $N_4 := .80369$ $N_5 := .59083$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[E \cdot D \cdot \left[A \cdot C - N_u \cdot (A - B)\right] - N_u \cdot \left(C^2 + N_u^2\right) \cdot (A - B)\right]}{E^2 \cdot D^2 \cdot \left[A \cdot C - N_u \cdot (A - B)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2} = 0.256747$$

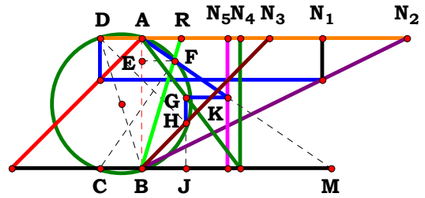
$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[E \cdot D \cdot \left[A \cdot C - N_u \cdot (A - B)\right] - N_u \cdot \left(C^2 + N_u^2\right) \cdot (A - B)\right]}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[E \cdot D \cdot \left[A \cdot C - N_u \cdot (A - B)\right] - N_u \cdot \left(C^2 + N_u^2\right) \cdot (A - B)\right]\right]^2}}$$

$$Den := \frac{E^2 \cdot D^2 \cdot \left[A \cdot C - N_u \cdot (A - B)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2}{\sqrt{\left[E^2 \cdot D^2 \cdot \left[A \cdot C - N_u \cdot (A - B)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left(C^2 + N_u^2\right) \cdot \left[E \cdot D \cdot \left[A \cdot C - N_u \cdot (A - B)\right] - N_u \cdot \left(C^2 + N_u^2\right) \cdot (A - B)\right] \cdot \sqrt{\left[D^2 \cdot E^2 \cdot \left[A \cdot C - N_u \cdot (A - B)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right]^2}}{\left[D^2 \cdot E^2 \cdot \left[A \cdot C - N_u \cdot (A - B)\right]^2 + A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2\right] \cdot \sqrt{A^2 \cdot N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot \left[E \cdot D \cdot \left[A \cdot C - N_u \cdot (A - B)\right] - N_u \cdot \left(C^2 + N_u^2\right) \cdot (A - B)\right]^2}} = 0$$

4RST5B6R1



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 0.98040$
$N_4 = 0.75526$
$N_5 = 0.65863$
$R = 0.30377$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := .98040$

$N_4 := .75526$ $N_5 := .65863$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

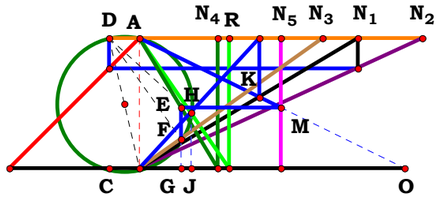
$$\frac{E \cdot A \cdot D \cdot \left[A \cdot C - N_u \cdot (A - B)\right] - A \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A - B)}{E \cdot D \cdot (A - B) \cdot \left[A \cdot C - N_u \cdot (A - B)\right] + A^2 \cdot N_u \cdot \left(C^2 + {N_u}^2\right)} = 0.303773$$

$$Num := \frac{E \cdot A \cdot D \cdot \left[A \cdot C - N_u \cdot (A - B)\right] - A \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A - B)}{\sqrt{\left[E \cdot A \cdot D \cdot \left[A \cdot C - N_u \cdot (A - B)\right] - A \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A - B)\right]^2}}$$

$$Den := \frac{E \cdot D \cdot (A - B) \cdot \left[A \cdot C - N_u \cdot (A - B)\right] + A^2 \cdot N_u \cdot \left(C^2 + {N_u}^2\right)}{\sqrt{\left[E \cdot D \cdot (A - B) \cdot \left[A \cdot C - N_u \cdot (A - B)\right] + A^2 \cdot N_u \cdot \left(C^2 + {N_u}^2\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[A \cdot D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right] - A \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A - B)\right] \cdot \sqrt{\left[A^2 \cdot N_u \cdot \left(C^2 + {N_u}^2\right) + D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right] \cdot (A - B)\right]^2}}{\left[A^2 \cdot N_u \cdot \left(C^2 + {N_u}^2\right) + D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right] \cdot (A - B)\right] \cdot \sqrt{\left[A \cdot D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right] - A \cdot N_u \cdot \left(C^2 + {N_u}^2\right) \cdot (A - B)\right]^2}} = 0$$



$N_1 = 1.67305$
$N_2 = 2.16702$
$N_3 = 1.40657$
$N_4 = 0.60029$
$N_5 = 1.08481$
$R = 0.69075$

Unit. $AB := 1$ Given. $N_1 := 1.67305$ $N_2 := 2.16702$ $N_3 := 1.40657$

$N_4 := .60029$ $N_5 := 1.08481$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{E \cdot A \cdot D \cdot \left[A \cdot C - N_u \cdot (A - B)\right] + A \cdot \left(C^2 + N_u{}^2\right) \cdot \left[A^2 - N_u \cdot (A - B)\right]}{E \cdot D \cdot (A - B) \cdot \left[A \cdot C - N_u \cdot (A - B)\right] + A^2 \cdot \left(C^2 + N_u{}^2\right) \cdot \left(A - B + N_u\right)} = 0.690754$$

$$Num := \frac{E \cdot A \cdot D \cdot \left[A \cdot C - N_u \cdot (A - B)\right] + A \cdot \left(C^2 + N_u{}^2\right) \cdot \left[A^2 - N_u \cdot (A - B)\right]}{\sqrt{\left[E \cdot A \cdot D \cdot \left[A \cdot C - N_u \cdot (A - B)\right] + A \cdot \left(C^2 + N_u{}^2\right) \cdot \left[A^2 - N_u \cdot (A - B)\right]\right]^2}}$$

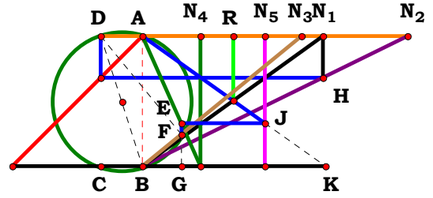
$$Den := \frac{E \cdot D \cdot (A - B) \cdot \left[A \cdot C - N_u \cdot (A - B)\right] + A^2 \cdot \left(C^2 + N_u{}^2\right) \cdot \left(A - B + N_u\right)}{\sqrt{\left[E \cdot D \cdot (A - B) \cdot \left[A \cdot C - N_u \cdot (A - B)\right] + A^2 \cdot \left(C^2 + N_u{}^2\right) \cdot \left(A - B + N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left[A^2 \cdot \left(C^2 + N_u{}^2\right) \cdot \left(A - B + N_u\right) + D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right] \cdot (A - B)\right]^2} \cdot \left[A \cdot \left(C^2 + N_u{}^2\right) \cdot \left[A^2 - N_u \cdot (A - B)\right] + A \cdot D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right]\right]}{\sqrt{\left[A \cdot \left(C^2 + N_u{}^2\right) \cdot \left[A^2 - N_u \cdot (A - B)\right] + A \cdot D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right]\right]^2} \cdot \left[A^2 \cdot \left(C^2 + N_u{}^2\right) \cdot \left(A - B + N_u\right) + D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right] \cdot (A - B)\right]} = 0$$

4RST5B6R3



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 1.22254$
$N_4 = 0.44532$
$N_5 = 0.93952$
$R = 0.69579$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := 1.22254$

$N_4 := .44532$ $N_5 := .93952$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

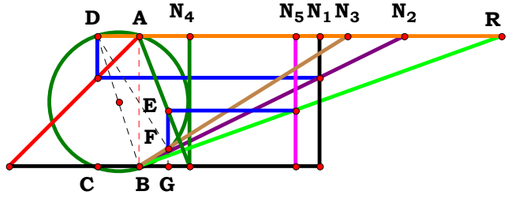
$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{A^2 \cdot \left(C^2 + N_u{}^2\right) + D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right]} = 0.695788$$

$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{A^2 \cdot \left(C^2 + N_u{}^2\right) + D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right]}{\sqrt{\left[A^2 \cdot \left(C^2 + N_u{}^2\right) + D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{\left[A^2 \cdot \left(C^2 + N_u{}^2\right) + D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right]\right]^2} \cdot \left(C^2 + N_u{}^2\right)}{\left[A^2 \cdot \left(C^2 + N_u{}^2\right) + D \cdot E \cdot \left[A \cdot C - N_u \cdot (A - B)\right]\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$



$N_1 = 1.38247$
$N_2 = 2.03142$
$N_3 = 1.60029$
$N_4 = 0.38720$
$N_5 = 1.20104$
$R = 2.77566$

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 2.03142$ $N_3 := 1.60029$

$N_4 := .38720$ $N_5 := 1.20104$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[A \cdot \left(C^2 - D \cdot C + N_u{}^2\right) + D \cdot N_u \cdot (A - B)\right]} = 2.775673$$

$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

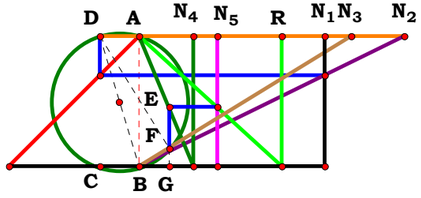
$$Den := \frac{E \cdot \left[A \cdot \left(C^2 - D \cdot C + N_u{}^2\right) + D \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[E \cdot \left[A \cdot \left(C^2 - D \cdot C + N_u{}^2\right) + D \cdot N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{E^2 \cdot \left[A \cdot \left(C^2 - D \cdot C + N_u{}^2\right) + D \cdot N_u \cdot (A - B)\right]^2}}{E \cdot \left[A \cdot \left(C^2 - D \cdot C + N_u{}^2\right) + D \cdot N_u \cdot (A - B)\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST5B6R5



$N_1 = 1.42122$
$N_2 = 2.03142$
$N_3 = 1.62935$
$N_4 = 0.41626$
$N_5 = 0.60052$
$R = 1.09820$

Unit. $AB := 1$ Given. $N_1 := 1.42122$ $N_2 := 2.03142$ $N_3 := 1.62935$

$N_4 := .41626$ $N_5 := .60052$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[A \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right]} = 1.098197$$

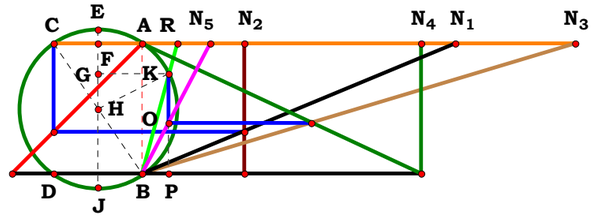
$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{E \cdot \left[A \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[E \cdot \left[A \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{E^2 \cdot \left[A \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right]^2} \cdot \left(C^2 + N_u{}^2\right)}{E \cdot \left[A \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right] \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$



$N_1 = 2.39948$
$N_2 = 0.78196$
$N_3 = 3.32436$
$N_4 = 2.14033$
$N_5 = 0.52303$
$R = 0.26797$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := .78196$ $N_3 := 3.32436$

$N_4 := 2.14033$ $N_5 := .52303$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{2 \cdot C \cdot \left(\sqrt{N_u}\right)^3 \cdot \sqrt{B}}{\sqrt{N_u \cdot \left[B \cdot E^2 \cdot (C+D)^2 - 4 \cdot B \cdot C^2 \cdot N_u^{\,2} + 4 \cdot C \cdot E \cdot N_u \cdot (C+D) \cdot (A-B)\right]} + \sqrt{B} \cdot \sqrt{N_u} \cdot E \cdot (C+D)} = 0.267969$$

$$Num := \frac{2 \cdot C \cdot \left(\sqrt{N_u}\right)^3 \cdot \sqrt{B}}{\sqrt{\left[2 \cdot C \cdot \left(\sqrt{N_u}\right)^3 \cdot \sqrt{B}\right]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot \left[B \cdot E^2 \cdot (C+D)^2 - 4 \cdot B \cdot C^2 \cdot N_u^{\,2} + 4 \cdot C \cdot E \cdot N_u \cdot (C+D) \cdot (A-B)\right]} + \sqrt{B} \cdot \sqrt{N_u} \cdot E \cdot (C+D)}{\sqrt{\left[\sqrt{N_u \cdot \left[B \cdot E^2 \cdot (C+D)^2 - 4 \cdot B \cdot C^2 \cdot N_u^{\,2} + 4 \cdot C \cdot E \cdot N_u \cdot (C+D) \cdot (A-B)\right]} + \sqrt{B} \cdot \sqrt{N_u} \cdot E \cdot (C+D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B} \cdot C \cdot N_u^{\frac{3}{2}} \cdot \sqrt{\left[\sqrt{N_u \cdot \left[B \cdot E^2 \cdot (C+D)^2 - 4 \cdot B \cdot C^2 \cdot N_u^{\,2} + 4 \cdot C \cdot E \cdot N_u \cdot (C+D) \cdot (A-B)\right]} + \sqrt{B} \cdot E \cdot \sqrt{N_u} \cdot (C+D)\right]^2}}{\left[\sqrt{N_u \cdot \left[B \cdot E^2 \cdot (C+D)^2 - 4 \cdot B \cdot C^2 \cdot N_u^{\,2} + 4 \cdot C \cdot E \cdot N_u \cdot (C+D) \cdot (A-B)\right]} + \sqrt{B} \cdot E \cdot \sqrt{N_u} \cdot (C+D)\right] \cdot \sqrt{B \cdot C^2 \cdot N_u^{\,3}}} = 0$$

4RST6AB1R1

Unit.

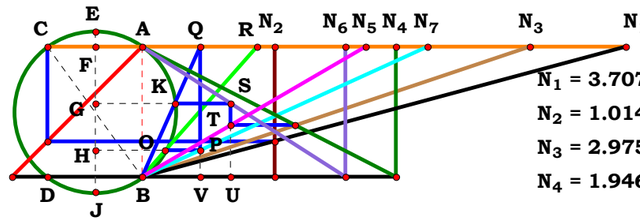
$AB := 1$

Given.

$N_1 := 3.70706$ $N_4 := 1.94661$

$N_2 := 1.01441$ $N_5 := 1.71438$

$N_3 := 2.97567$ $N_6 := 1.55941$ $N_7 := 2.18899$



$N_1 = 3.70706$ $N_5 = 1.71438$

$N_2 = 1.01441$ $N_6 = 1.55941$

$N_3 = 2.97567$ $N_7 = 2.18899$

$N_4 = 1.94661$ $R = 0.88032$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

$$TU := \frac{N_4}{N_3 + N_4} \qquad BU := N_5 \cdot TU$$

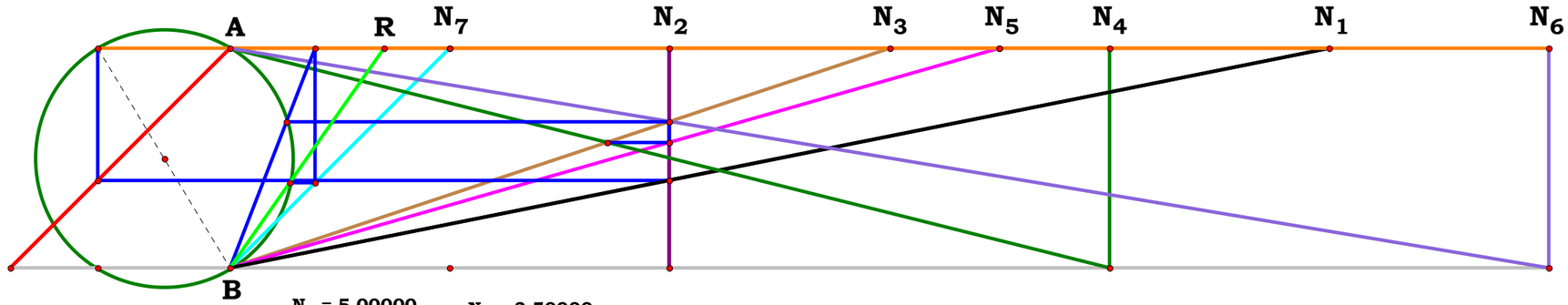
$$SU := \frac{N_6 - BU}{N_6} \qquad GJ := SU + EF$$

$$GK := \sqrt{GJ \cdot (EJ - GJ)} \qquad AQ := \frac{GK - AF}{SU}$$

$$PV := \frac{AQ}{N_7} \qquad HJ := PV + EF$$

$$HO := \sqrt{HJ \cdot (EJ - HJ)} \qquad R := \frac{HO - AF}{PV}$$

$R = 0.880317$



$N_1 = 5.00000$ $N_5 = 3.50000$ $AB = 1.00000$ $EF = 0.08310$ $GJ = 0.74976$ $HJ = 0.47125$

$N_2 = 2.00000$ $N_6 = 6.00000$ $AC = 0.60000$ $TU = 0.57143$ $GK = 0.55877$ $HO = 0.57227$

$N_3 = 3.00000$ $N_7 = 1.00000$ $EJ = 1.16619$ $BU = 2.00000$ $AQ = 0.38815$ $R - \frac{HO - AF}{PV} = 0.00000$

$N_4 = 4.00000$ $R = 0.70144$ $AF = 0.30000$ $SU = 0.66667$ $PV = 0.38815$

4RST6AB1R2

Unit.

$AB := 1$

Given.

$N_1 := 4.20104$

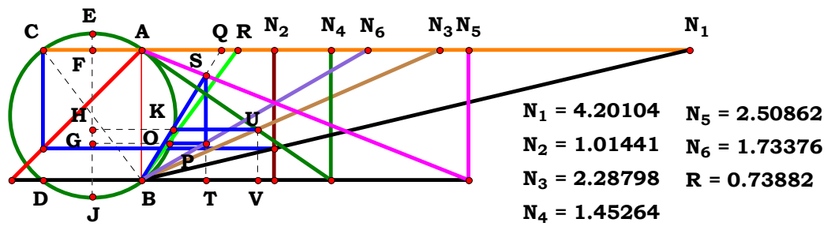
$N_2 := 1.01441$

$N_3 := 2.28798$

$N_4 := 1.45264$

$N_5 := 2.50862$

$N_6 := 1.73376$



$N_1 = 4.20104$ $N_5 = 2.50862$

$N_2 = 1.01441$ $N_6 = 1.73376$

$N_3 = 2.28798$ $R = 0.73882$

$N_4 = 1.45264$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

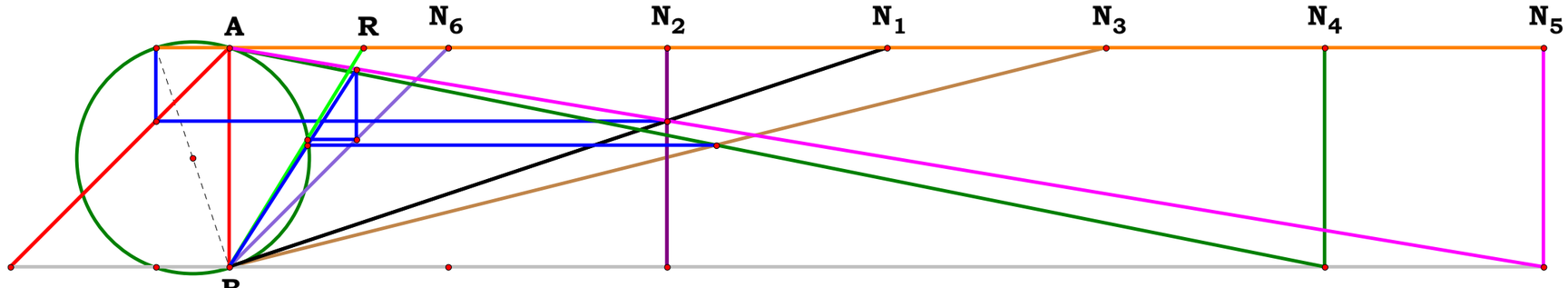
$$UV := \frac{N_4}{N_3 + N_4} \qquad HJ := UV + EF$$

$$HK := \sqrt{HJ \cdot (EJ - HJ)} \qquad AQ := \frac{HK - AF}{UV}$$

$$BT := \frac{AQ \cdot N_5}{AQ + N_5} \qquad PT := \frac{BT}{N_6}$$

$$GJ := PT + EF \qquad GO := \sqrt{GJ \cdot (EJ - GJ)}$$

$$R := \frac{GO - AF}{PT} \qquad R = 0.738818$$



$N_1 = 3.00000$ $N_4 = 5.00000$ $AB = 1.00000$ $EF = 0.02705$ $AQ = 0.64340$ $GO = 0.52077$

$N_2 = 2.00000$ $N_5 = 6.00000$ $AC = 0.33333$ $UV = 0.55556$ $BT = 0.58109$ $R\text{-}\frac{GO\text{-}AF}{PT} = 0.00000$

$N_3 = 4.00000$ $N_6 = 1.00000$ $EJ = 1.05409$ $HJ = 0.58260$ $PT = 0.58109$

$R = 0.60938$ $AF = 0.16667$ $HK = 0.52411$ $GJ = 0.60813$

Definitions.

$$A := \left(2 \cdot N_5 - N_6 + N_6 \cdot \sqrt{AC^2 + 1}\right) \cdot \left(N_3 + N_4\right) \cdot AC - 2 \cdot N_4 \cdot N_5 \cdot N_6 \cdot \left(\sqrt{AC^2 + 1} - 1\right)$$

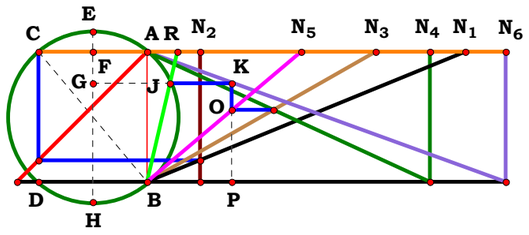
$$B := \left(N_6 - 2 \cdot N_5 + N_6 \cdot \sqrt{AC^2 + 1}\right) \cdot \left(N_3 + N_4\right) \cdot AC - 2 \cdot N_4 \cdot N_5 \cdot N_6 \cdot \left(\sqrt{AC^2 + 1} + 1\right)$$

$$C := \left(2 \cdot N_5 - N_6 + N_6 \cdot \sqrt{AC^2 + 1}\right) \cdot \left(N_3 + N_4\right)$$

$$D := \left(N_6 - 2 \cdot N_5 + N_6 \cdot \sqrt{AC^2 + 1}\right) \cdot \left(N_3 + N_4\right) \qquad P := \sqrt{\left(N_3 + N_4\right)^2 \cdot AC^2 + 4 \cdot N_3 \cdot N_4}$$

$$X := \sqrt{\left[A \cdot \sqrt{\left(N_3 + N_4\right)^2} - C \cdot P\right] \cdot \left[B \cdot \sqrt{\left(N_3 + N_4\right)^2} - D \cdot P\right]} \qquad Y := \sqrt{16 \cdot N_6^2 \cdot \left[P \cdot \left(N_3 + N_4\right) + \left[2 \cdot N_4 \cdot N_5 - AC \cdot \left(N_3 + N_4\right)\right] \cdot \sqrt{\left(N_3 + N_4\right)^2}\right]^2}$$

$$R - \frac{N_6 \cdot (AC \cdot Y - 4 \cdot X) \cdot \left[\left[AC \cdot \sqrt{\left(N_3 + N_4\right)^2} - P\right] \cdot \left(N_3 + N_4\right) - 2 \cdot N_4 \cdot N_5 \cdot \sqrt{\left(N_3 + N_4\right)^2}\right]}{2 \cdot N_5 \cdot Y \cdot \left[P - AC \cdot \sqrt{\left(N_3 + N_4\right)^2}\right] \cdot \left(N_3 + N_4\right)} = 0$$



$N_1 = 2.43822$
$N_2 = 0.40421$
$N_3 = 1.75526$
$N_4 = 2.16939$
$N_5 = 1.18167$
$N_6 = 2.75076$
$R = 0.23441$

Unit. $AB := 1$ **Given.** $N_1 := 2.43822$ $N_2 := .40421$ $N_3 := 1.75526$

$N_4 := 2.16939$ $N_5 := 1.18167$ $N_6 := 2.75076$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}+E\cdot(C+D)\cdot(A-B)}{2\cdot B\cdot(C\cdot E-C\cdot F+D\cdot E)} = 0.234414$$

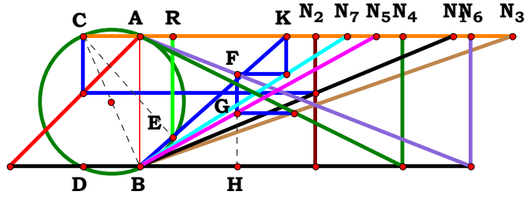
$$Num := \frac{\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}+E\cdot(C+D)\cdot(A-B)}{\sqrt{\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}+E\cdot(C+D)\cdot(A-B)\right]^2}}$$

$$Den := \frac{2\cdot B\cdot(C\cdot E-C\cdot F+D\cdot E)}{\sqrt{[2\cdot B\cdot(C\cdot E-C\cdot F+D\cdot E)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}+E\cdot(C+D)\cdot(A-B)\right]\cdot\sqrt{B^2\cdot(C\cdot E-C\cdot F+D\cdot E)^2}}{B\cdot\sqrt{\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}+E\cdot(C+D)\cdot(A-B)\right]^2}\cdot(C\cdot E-C\cdot F+D\cdot E)} = 0$$

4RST6B1R4



$N_1 = 2.39948$
$N_2 = 1.34373$
$N_3 = 2.85944$
$N_4 = 2.01441$
$N_5 = 1.81124$
$N_6 = 2.53768$
$N_7 = 1.58847$
$R = 0.25202$

Unit. $AB := 1$ Given. $N_1 := 2.39938$ $N_2 := 1.34373$ $N_3 := 2.85944$ $N_4 := 2.01441$

$N_5 := 1.81124$ $N_6 := 2.53768$ $N_7 := 1.58847$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.

$$\frac{N_u\cdot[C\cdot(E-F)+D\cdot E]\cdot\left[E\cdot(C+D)\cdot\left[B\cdot G+N_u\cdot(A-B)\right]-C\cdot F\cdot N_u\cdot(A-B)\right]}{B\cdot\left[E^2\cdot\left(G^2+N_u{}^2\right)\cdot(C+D)^2-2\cdot E\cdot C\cdot F\cdot N_u{}^2\cdot(C+D)+C^2\cdot F^2\cdot N_u{}^2\right]}=0.252028$$

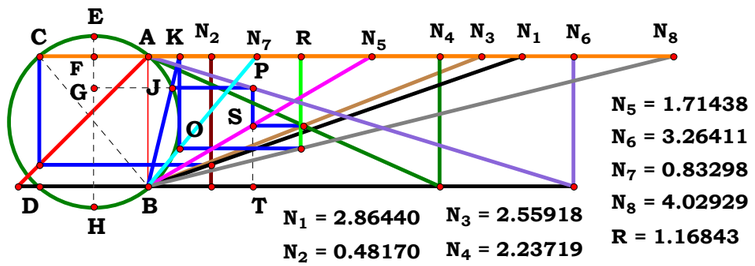
$$Num := \frac{N_u\cdot[C\cdot(E-F)+D\cdot E]\cdot\left[E\cdot(C+D)\cdot\left[B\cdot G+N_u\cdot(A-B)\right]-C\cdot F\cdot N_u\cdot(A-B)\right]}{\sqrt{\left[N_u\cdot[C\cdot(E-F)+D\cdot E]\cdot\left[E\cdot(C+D)\cdot\left[B\cdot G+N_u\cdot(A-B)\right]-C\cdot F\cdot N_u\cdot(A-B)\right]\right]^2}}$$

$$Den := \frac{B\cdot\left[E^2\cdot\left(G^2+N_u{}^2\right)\cdot(C+D)^2-2\cdot E\cdot C\cdot F\cdot N_u{}^2\cdot(C+D)+C^2\cdot F^2\cdot N_u{}^2\right]}{\sqrt{\left[B\cdot\left[E^2\cdot\left(G^2+N_u{}^2\right)\cdot(C+D)^2-2\cdot E\cdot C\cdot F\cdot N_u{}^2\cdot(C+D)+C^2\cdot F^2\cdot N_u{}^2\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{N_u\cdot[D\cdot E+C\cdot(E-F)]\cdot\sqrt{B^2\cdot\left[E^2\cdot\left(G^2+N_u{}^2\right)\cdot(C+D)^2+C^2\cdot F^2\cdot N_u{}^2-2\cdot C\cdot E\cdot F\cdot N_u{}^2\cdot(C+D)\right]^2}\cdot\left[E\cdot\left[B\cdot G+N_u\cdot(A-B)\right]\cdot(C+D)-C\cdot F\cdot N_u\cdot(A-B)\right]}{B\cdot\left[E^2\cdot\left(G^2+N_u{}^2\right)\cdot(C+D)^2+C^2\cdot F^2\cdot N_u{}^2-2\cdot C\cdot E\cdot F\cdot N_u{}^2\cdot(C+D)\right]\cdot\sqrt{N_u{}^2\cdot[D\cdot E+C\cdot(E-F)]^2\cdot\left[E\cdot\left[B\cdot G+N_u\cdot(A-B)\right]\cdot(C+D)-C\cdot F\cdot N_u\cdot(A-B)\right]^2}}=0$$



Unit. $AB := 1$ Given. $N_1 := 2.86440$ $N_2 := .48170$ $N_3 := 2.55918$ $N_4 := 2.23719$

$N_5 := 1.71438$ $N_6 := 3.26411$ $N_7 := .83298$ $N_8 := 4.02929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

Descriptions.

$$\frac{G\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}+E\cdot(C+D)\cdot(A-B)\right]}{2\cdot B\cdot H\cdot[C\cdot(E-F)+D\cdot E]}=1.168423$$

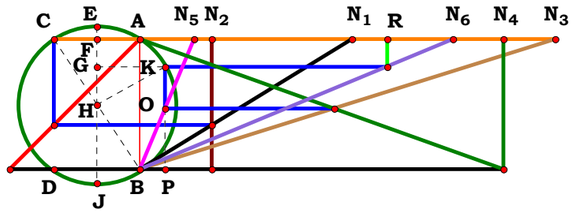
$$Num := \frac{G\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}+E\cdot(C+D)\cdot(A-B)\right]}{\sqrt{\left[G\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}+E\cdot(C+D)\cdot(A-B)\right]\right]^2}}$$

$$Den := \frac{2\cdot B\cdot H\cdot[C\cdot(E-F)+D\cdot E]}{\sqrt{[2\cdot B\cdot H\cdot[C\cdot(E-F)+D\cdot E]]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{G\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}+E\cdot(C+D)\cdot(A-B)\right]\cdot\sqrt{B^2\cdot H^2\cdot[D\cdot E+C\cdot(E-F)]^2}}{B\cdot H\cdot[D\cdot E+C\cdot(E-F)]\cdot\sqrt{G^2\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}+E\cdot(C+D)\cdot(A-B)\right]^2}}=0$$

4RST6B1R6



$N_1 = 1.62462$
$N_2 = 0.54950$
$N_3 = 3.18876$
$N_4 = 2.78928$
$N_5 = 0.41649$
$N_6 = 2.40207$
$R = 1.89571$

Unit. $AB := 1$ Given. $N_1 := 1.62462$ $N_2 := .54950$ $N_3 := 3.18875$

$N_4 := 2.78928$ $N_5 := .41649$ $N_6 := 2.40207$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{\sqrt{N_u}\cdot\left[\sqrt{N_u\cdot\left[B\cdot E^2\cdot(C+D)^2-4\cdot B\cdot C^2\cdot N_u^{\,2}+4\cdot C\cdot E\cdot N_u\cdot(C+D)\cdot(A-B)\right]}+\sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]}{2\cdot F\cdot(C+D)\cdot\sqrt{B}\cdot E} = 1.895708$$

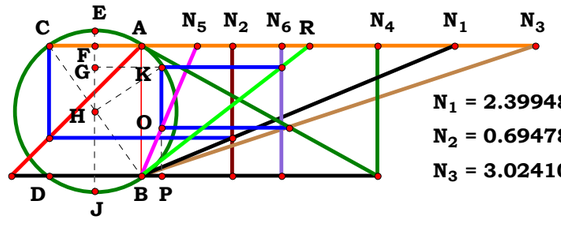
$$Num := \frac{\sqrt{N_u}\cdot\left[\sqrt{N_u\cdot\left[B\cdot E^2\cdot(C+D)^2-4\cdot B\cdot C^2\cdot N_u^{\,2}+4\cdot C\cdot E\cdot N_u\cdot(C+D)\cdot(A-B)\right]}+\sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]}{\sqrt{\left[\sqrt{N_u}\cdot\left[\sqrt{N_u\cdot\left[B\cdot E^2\cdot(C+D)^2-4\cdot B\cdot C^2\cdot N_u^{\,2}+4\cdot C\cdot E\cdot N_u\cdot(C+D)\cdot(A-B)\right]}+\sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]\right]^2}}$$

$$Den := \frac{2\cdot F\cdot(C+D)\cdot\sqrt{B}\cdot E}{\sqrt{\left[2\cdot F\cdot(C+D)\cdot\sqrt{B}\cdot E\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{N_u}\cdot\left[\sqrt{N_u\cdot\left[B\cdot E^2\cdot(C+D)^2-4\cdot B\cdot C^2\cdot N_u^{\,2}+4\cdot C\cdot E\cdot N_u\cdot(C+D)\cdot(A-B)\right]}+\sqrt{B}\cdot E\cdot\sqrt{N_u}\cdot(C+D)\right]\cdot\sqrt{B\cdot E^2\cdot F^2\cdot(C+D)^2}}{\sqrt{B}\cdot E\cdot F\cdot(C+D)\cdot\sqrt{N_u\cdot\left[\sqrt{N_u\cdot\left[B\cdot E^2\cdot(C+D)^2-4\cdot B\cdot C^2\cdot N_u^{\,2}+4\cdot C\cdot E\cdot N_u\cdot(C+D)\cdot(A-B)\right]}+\sqrt{B}\cdot E\cdot\sqrt{N_u}\cdot(C+D)\right]^2}} = 0$$

4RST6B1R7



$N_1 = 2.39948$ $N_2 = 0.69478$ $N_3 = 3.02410$ $N_4 = 1.81101$ $N_5 = 0.42617$ $N_6 = 1.07512$ $R = 1.29014$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := .69478$ $N_3 := 3.02410$ $N_4 := 1.81101$ $N_5 := .42617$ $N_6 := 1.07512$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(C+D)\cdot\sqrt{B}\cdot E}{F\cdot\left[\sqrt{N_u}\cdot\left[B\cdot E^2\cdot(C+D)^2-4\cdot B\cdot C^2\cdot N_u{}^2+4\cdot C\cdot E\cdot N_u\cdot(C+D)\cdot(A-B)\right]+\sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]}=1.290132$$

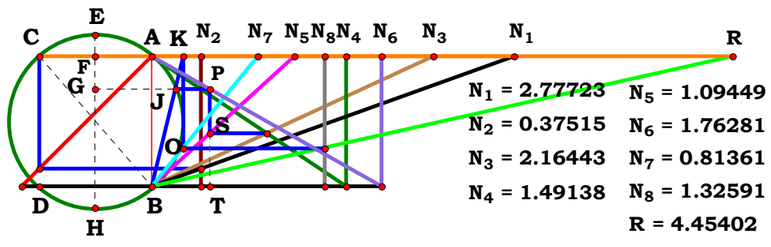
$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(C+D)\cdot\sqrt{B}\cdot E}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^3\cdot(C+D)\cdot\sqrt{B}\cdot E\right]^2}}$$

$$Den := \frac{F\cdot\left[\sqrt{N_u}\cdot\left[B\cdot E^2\cdot(C+D)^2-4\cdot B\cdot C^2\cdot N_u{}^2+4\cdot C\cdot E\cdot N_u\cdot(C+D)\cdot(A-B)\right]+\sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]}{\sqrt{\left[F\cdot\left[\sqrt{N_u}\cdot\left[B\cdot E^2\cdot(C+D)^2-4\cdot B\cdot C^2\cdot N_u{}^2+4\cdot C\cdot E\cdot N_u\cdot(C+D)\cdot(A-B)\right]+\sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{B}\cdot E\cdot N_u{}^{\frac{3}{2}}\cdot\sqrt{F^2\cdot\left[\sqrt{N_u}\cdot\left[B\cdot E^2\cdot(C+D)^2-4\cdot B\cdot C^2\cdot N_u{}^2+4\cdot C\cdot E\cdot N_u\cdot(C+D)\cdot(A-B)\right]+\sqrt{B}\cdot E\cdot\sqrt{N_u}\cdot(C+D)\right]^2}\cdot(C+D)}{F\cdot\left[\sqrt{N_u}\cdot\left[B\cdot E^2\cdot(C+D)^2-4\cdot B\cdot C^2\cdot N_u{}^2+4\cdot C\cdot E\cdot N_u\cdot(C+D)\cdot(A-B)\right]+\sqrt{B}\cdot E\cdot\sqrt{N_u}\cdot(C+D)\right]\cdot\sqrt{B\cdot E^2\cdot N_u{}^3\cdot(C+D)^2}}=0$$



$N_1 = 2.77723$ $N_5 = 1.09449$
$N_2 = 0.37515$ $N_6 = 1.76281$
$N_3 = 2.16443$ $N_7 = 0.81361$
$N_4 = 1.49138$ $N_8 = 1.32591$
$R = 4.45402$

Unit. $AB := 1$ Given. $N_1 := 2.77723$ $N_2 := .37515$ $N_3 := 2.16443$ $N_4 := 1.49138$

$N_5 := 1.09449$ $N_6 := 1.76281$ $N_7 := .81361$ $N_8 := 1.32591$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

Descriptions.

$$\frac{2\cdot B\cdot N_u^{\,2}\cdot(C\cdot E - C\cdot F + D\cdot E)}{G\cdot H\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2 - 4\cdot B^2\cdot C^2\cdot F^2 + 4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)} + E\cdot(C+D)\cdot(A-B)\right]} = 4.454068$$

$$Num := \frac{2\cdot B\cdot N_u^{\,2}\cdot(C\cdot E - C\cdot F + D\cdot E)}{\sqrt{\left[2\cdot B\cdot N_u^{\,2}\cdot(C\cdot E - C\cdot F + D\cdot E)\right]^2}}$$

$$Den := \frac{G\cdot H\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2 - 4\cdot B^2\cdot C^2\cdot F^2 + 4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)} + E\cdot(C+D)\cdot(A-B)\right]}{\sqrt{\left[G\cdot H\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2 - 4\cdot B^2\cdot C^2\cdot F^2 + 4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)} + E\cdot(C+D)\cdot(A-B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B\cdot N_u^{\,2}\cdot\sqrt{G^2\cdot H^2\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2 - 4\cdot B^2\cdot C^2\cdot F^2 + 4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)} + E\cdot(C+D)\cdot(A-B)\right]^2}\cdot(C\cdot E - C\cdot F + D\cdot E)}{G\cdot H\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2 - 4\cdot B^2\cdot C^2\cdot F^2 + 4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)} + E\cdot(C+D)\cdot(A-B)\right]\cdot\sqrt{B^2\cdot N_u^{\,4}\cdot(C\cdot E - C\cdot F + D\cdot E)^2}} = 0$$

4RST6AB1R9

Unit.

$AB := 1$

Given.

$N_1 := 3.70706$

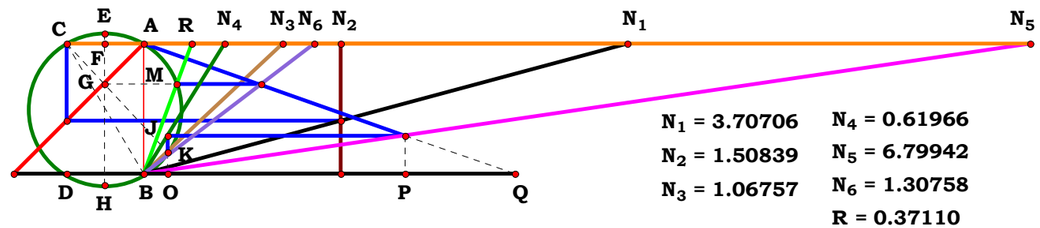
$N_2 := 1.50839$

$N_3 := 1.06757$

$N_4 := .61966$

$N_5 := 6.79942$

$N_6 := 1.30758$



$N_1 = 3.70706$ $N_4 = 0.61966$

$N_2 = 1.50839$ $N_5 = 6.79942$

$N_3 = 1.06757$ $N_6 = 1.30758$

$R = 0.37110$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad EH := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EH - AB}{2}$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad CN_3 := N_3 + AC$$

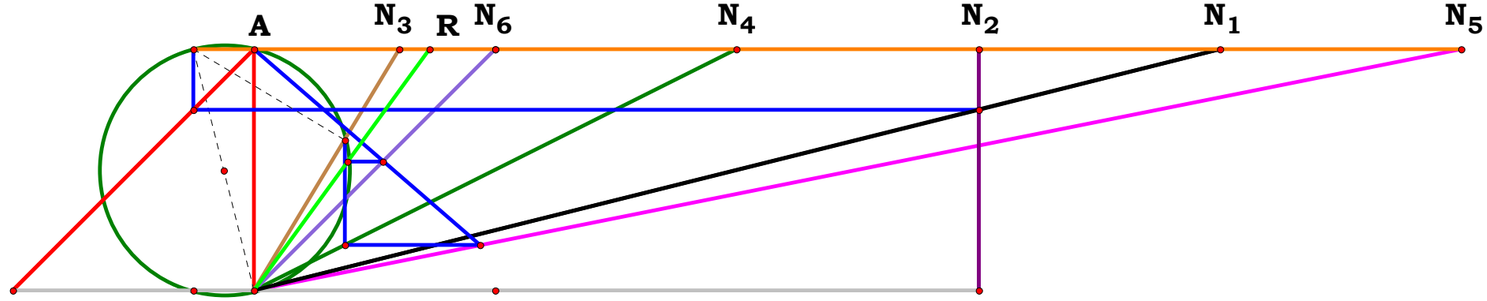
$$KN_3 := \frac{N_3 \cdot CN_3}{BN_3} \qquad BO := \frac{N_3 \cdot (BN_3 - KN_3)}{BN_3}$$

$$JO := \frac{BO}{N_4} \qquad BP := N_5 \cdot JO$$

$$BQ := \frac{BP \cdot AB}{AB - JO} \qquad FG := \frac{N_6}{BQ + N_6}$$

$$EG := FG + EF \qquad GM := \sqrt{EG \cdot (EH - EG)}$$

$$R := \frac{GM - AF}{AB - FG} \qquad R = 0.371102$$



B

$N_1 = 4.00000$ $N_4 = 2.00000$ $AB = 1.00000$ $EF = 0.01539$ $BO = 0.37500$ $FG = 0.46429$

$N_2 = 3.00000$ $N_5 = 5.00000$ $AC = 0.25000$ $BN_3 = 1.16619$ $JO = 0.18750$ $EG = 0.47967$

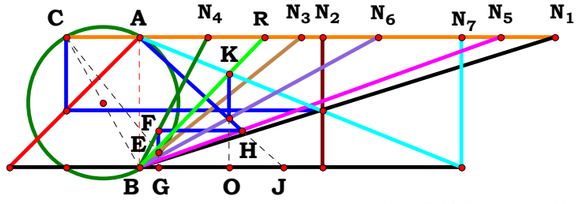
$N_3 = 0.60000$ $N_6 = 1.00000$ $EH = 1.03078$ $CN_3 = 0.85000$ $BP = 0.93750$ $GM = 0.51415$

$R = 0.72641$ $AF = 0.12500$ $KN_3 = 0.43732$ $BQ = 1.15385$ $R - \frac{GM - AF}{AB - FG} = 0.00000$

Definitions.

$$R - \frac{\begin{aligned}&\sqrt{N_1^4} \cdot (N_1 - N_2) \cdot \left[N_6 \cdot \left[N_3^2 \cdot (N_1 - N_2 + N_1 \cdot N_4) - N_1 \cdot (N_3 - N_4)\right] - N_3 \cdot N_5 \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3)\right] \ \ldots \\ &+ -N_1^2 \cdot \sqrt{\begin{aligned}&N_6^2 \cdot (N_1 - N_2)^2 \cdot \left[N_3^2 \cdot (N_1 - N_2 + N_1 \cdot N_4) - N_1 \cdot (N_3 - N_4)\right]^2 + N_3^2 \cdot N_5^2 \cdot (N_1 - N_2)^2 \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3)^2 \ \ldots \\ &+ -2 \cdot N_3 \cdot N_5 \cdot N_6 \cdot \left(3 \cdot N_1^2 - 2 \cdot N_1 \cdot N_2 + N_2^2\right) \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3) \cdot \left[N_3^2 \cdot (N_1 - N_2 + N_1 \cdot N_4) - N_1 \cdot (N_3 - N_4)\right]\end{aligned}}\end{aligned}}{2 \cdot N_1 \cdot N_3 \cdot N_5 \cdot (N_1 \cdot N_3 - N_1 - N_2 \cdot N_3) \cdot \sqrt{N_1^4}} = 0$$

4RST6B1R10



$N_1 = 3.18403$ $N_3 = 1.24192$ $N_5 = 2.77013$ $N_7 = 2.46987$

$N_2 = 1.40185$ $N_4 = 0.52280$ $N_6 = 1.83061$ $R = 0.95450$

Unit. $AB := 1$ **Given.** $N_1 := 3.18403$ $N_2 := 1.40185$ $N_3 := 1.24192$ $N_4 := .52280$

$N_5 := 2.77013$ $N_6 := 1.83061$ $N_7 := 2.46987$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.

$$\frac{D \cdot N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right]}{F \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] + \left[B \cdot \left(C^2 + {N_u}^2\right) - B \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right] \cdot E - G \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right]} = 0.954505$$

$$Num := \frac{D \cdot N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right]}{\sqrt{\left[D \cdot N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]^2}}$$

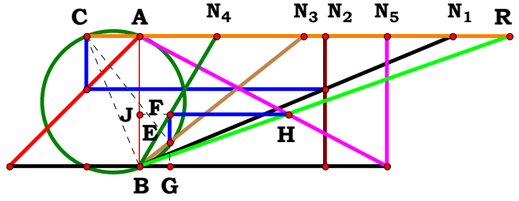
$$Den := \frac{F \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] + \left[B \cdot \left(C^2 + {N_u}^2\right) - B \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right] \cdot E - G \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right]}{\sqrt{\left[F \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right] + \left[B \cdot \left(C^2 + {N_u}^2\right) - B \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right] \cdot E - G \cdot D \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{D \cdot N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right] \cdot \sqrt{\left[E \cdot \left[B \cdot \left(C^2 + {N_u}^2\right) - B \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right] + D \cdot G \cdot \left[B \cdot C + N_u \cdot (A - B)\right] - D \cdot F \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]^2}}{\left[E \cdot \left[B \cdot \left(C^2 + {N_u}^2\right) - B \cdot C \cdot D - D \cdot N_u \cdot (A - B)\right] + D \cdot G \cdot \left[B \cdot C + N_u \cdot (A - B)\right] - D \cdot F \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right] \cdot \sqrt{D^2 \cdot {N_u}^2 \cdot \left[B \cdot C + N_u \cdot (A - B)\right]^2}} = 0$$

4RST6B1R11



$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 1.26129$
$N_4 = 0.59060$
$N_5 = 1.89841$
$R = 2.84269$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := 1.26129$

$N_4 := .59060$ $N_5 := 1.89841$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot N_u^{\,3} - D \cdot N_u^{\,2} \cdot (A - B) + B \cdot C \cdot N_u \cdot (C - D)}{D \cdot E \cdot \left[B \cdot C + N_u \cdot (A - B)\right]} = 2.842644$$

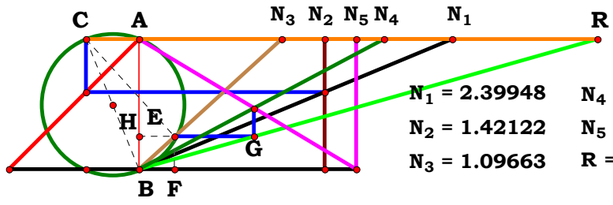
$$Num := \frac{B \cdot N_u^{\,3} - D \cdot N_u^{\,2} \cdot (A - B) + B \cdot C \cdot N_u \cdot (C - D)}{\sqrt{\left[B \cdot N_u^{\,3} - D \cdot N_u^{\,2} \cdot (A - B) + B \cdot C \cdot N_u \cdot (C - D)\right]^2}}$$

$$Den := \frac{D \cdot E \cdot \left[B \cdot C + N_u \cdot (A - B)\right]}{\sqrt{\left[D \cdot E \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{D^2 \cdot E^2 \cdot \left[B \cdot C + N_u \cdot (A - B)\right]^2} \cdot \left[B \cdot N_u^{\,3} - D \cdot (A - B) \cdot N_u^{\,2} + B \cdot C \cdot (C - D) \cdot N_u\right]}{D \cdot E \cdot \left[B \cdot C + N_u \cdot (A - B)\right] \cdot \sqrt{\left[B \cdot N_u^{\,3} - D \cdot (A - B) \cdot N_u^{\,2} + B \cdot C \cdot (C - D) \cdot N_u\right]^2}} = 0$$

4RST6B1R12



$N_1 = 2.39948$ $N_4 = 1.87881$
$N_2 = 1.42122$ $N_5 = 1.66595$
$N_3 = 1.09663$ $R = 3.51757$

Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := 1.09663$

$N_4 := 1.87881$ $N_5 := 1.66595$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{C \cdot (D + E) \cdot \left[B \cdot C + N_u \cdot (A - B)\right]} = 3.517552$$

$$Num := \frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

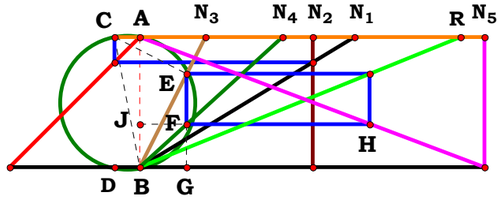
$$Den := \frac{C \cdot (D + E) \cdot \left[B \cdot C + N_u \cdot (A - B)\right]}{\sqrt{\left[C \cdot (D + E) \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{C^2 \cdot \left[B \cdot C + N_u \cdot (A - B)\right]^2 \cdot (D + E)^2}}{C \cdot \left[B \cdot C + N_u \cdot (A - B)\right] \cdot (D + E) \cdot \sqrt{B^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST6B1R13



$N_1 = 1.64399$
$N_2 = 1.32436$
$N_3 = 0.50580$
$N_4 = 1.09426$
$N_5 = 2.64422$
$R = 2.46063$

Unit. $AB := 1$ **Given.** $N_1 := 1.64399$ $N_2 := 1.32436$ $N_3 := .50580$

$N_4 := 1.09426$ $N_5 := 2.64422$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

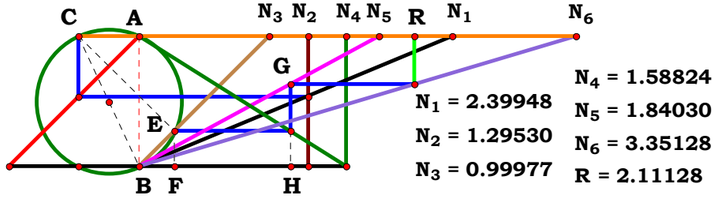
$$\frac{N_u \cdot \left[B \cdot {N_u}^2 - D \cdot N_u \cdot (A - B) + B \cdot C \cdot (C - D)\right]}{B \cdot C^2 \cdot E + C \cdot E \cdot N_u \cdot (A - B)} = 2.460633$$

$$Num := \frac{N_u \cdot \left[B \cdot {N_u}^2 - D \cdot N_u \cdot (A - B) + B \cdot C \cdot (C - D)\right]}{\sqrt{\left[N_u \cdot \left[B \cdot {N_u}^2 - D \cdot N_u \cdot (A - B) + B \cdot C \cdot (C - D)\right]\right]^2}}$$

$$Den := \frac{B \cdot C^2 \cdot E + C \cdot E \cdot N_u \cdot (A - B)}{\sqrt{\left[B \cdot C^2 \cdot E + C \cdot E \cdot N_u \cdot (A - B)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[B \cdot E \cdot C^2 + E \cdot N_u \cdot (A - B) \cdot C\right]^2} \cdot \left[B \cdot {N_u}^2 - D \cdot (A - B) \cdot N_u + B \cdot C \cdot (C - D)\right]}{\left[B \cdot E \cdot C^2 + E \cdot N_u \cdot (A - B) \cdot C\right] \cdot \sqrt{{N_u}^2 \cdot \left[B \cdot {N_u}^2 - D \cdot (A - B) \cdot N_u + B \cdot C \cdot (C - D)\right]^2}} = 0$$



Unit. $AB := 1$ Given. $N_1 := 2.39948$ $N_2 := 1.29530$ $N_3 := .99977$

$N_4 := 1.58824$ $N_5 := 1.84030$ $N_6 := 3.35128$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{E \cdot N_u^{\,2} \cdot \left[B \cdot N_u - C \cdot (A - B)\right]}{F \cdot B \cdot D \cdot \left(C^2 + N_u^{\,2}\right)} = 2.111274$$

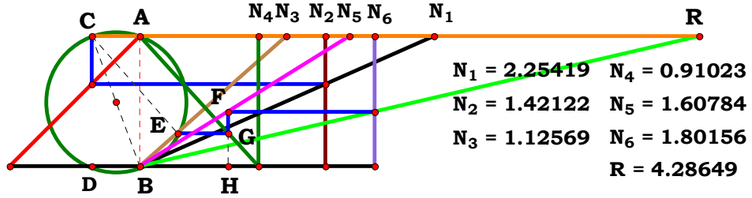
$$Num := \frac{E \cdot N_u^{\,2} \cdot \left[B \cdot N_u - C \cdot (A - B)\right]}{\sqrt{\left[E \cdot N_u^{\,2} \cdot \left[B \cdot N_u - C \cdot (A - B)\right]\right]^2}}$$

$$Den := \frac{F \cdot B \cdot D \cdot \left(C^2 + N_u^{\,2}\right)}{\sqrt{\left[F \cdot B \cdot D \cdot \left(C^2 + N_u^{\,2}\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{E \cdot N_u^{\,2} \cdot \left[B \cdot N_u - C \cdot (A - B)\right] \cdot \sqrt{B^2 \cdot D^2 \cdot F^2 \cdot \left(C^2 + N_u^{\,2}\right)^2}}{B \cdot D \cdot F \cdot \left(C^2 + N_u^{\,2}\right) \cdot \sqrt{E^2 \cdot N_u^{\,4} \cdot \left[B \cdot N_u - C \cdot (A - B)\right]^2}} = 0$$

4RST6B1R15



$N_1 = 2.25419$ $N_4 = 0.91023$
$N_2 = 1.42122$ $N_5 = 1.60784$
$N_3 = 1.12569$ $N_6 = 1.80156$
$R = 4.28649$

Unit. $AB := 1$ Given. $N_1 := 2.25419$ $N_2 := 1.42122$ $N_3 := 1.12569$

$N_4 := .91023$ $N_5 := 1.60784$ $N_6 := 1.80156$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

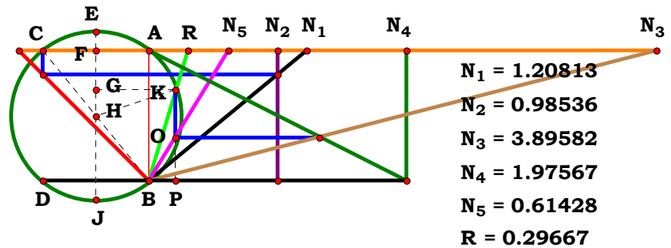
$$\frac{B \cdot D \cdot \left(C^2 + N_u{}^2\right)}{E \cdot F \cdot \left[B \cdot N_u - C \cdot (A - B)\right]} = 4.28652$$

$$Num := \frac{B \cdot D \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot D \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{E \cdot F \cdot \left[B \cdot N_u - C \cdot (A - B)\right]}{\sqrt{\left[E \cdot F \cdot \left[B \cdot N_u - C \cdot (A - B)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot D \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{E^2 \cdot F^2 \cdot \left[B \cdot N_u - C \cdot (A - B)\right]^2}}{E \cdot F \cdot \left[B \cdot N_u - C \cdot (A - B)\right] \cdot \sqrt{B^2 \cdot D^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$



Unit. $AB := 1$ Given. $N_1 := 1.20813$ $N_2 := .98536$ $N_3 := 3.89582$

$N_4 := 1.97567$ $N_5 := .61428$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{2\cdot C\cdot\left(\sqrt{N_u}\right)^3\cdot\sqrt{B}}{\sqrt{N_u\cdot\left[E^2\cdot B\cdot(C+D)^2-4\cdot E\cdot A\cdot C\cdot N_u\cdot(C+D)-4\cdot B\cdot C^2\cdot N_u{}^2\right]}+\sqrt{N_u}\cdot\sqrt{B}\cdot E\cdot(C+D)} = 0.296676$$

$$Num := \frac{2\cdot C\cdot\left(\sqrt{N_u}\right)^3\cdot\sqrt{B}}{\sqrt{\left[2\cdot C\cdot\left(\sqrt{N_u}\right)^3\cdot\sqrt{B}\right]^2}}$$

$$Den := \frac{\sqrt{N_u\cdot\left[E^2\cdot B\cdot(C+D)^2-4\cdot E\cdot A\cdot C\cdot N_u\cdot(C+D)-4\cdot B\cdot C^2\cdot N_u{}^2\right]}+\sqrt{N_u}\cdot\sqrt{B}\cdot E\cdot(C+D)}{\sqrt{\left[\sqrt{N_u\cdot\left[E^2\cdot B\cdot(C+D)^2-4\cdot E\cdot A\cdot C\cdot N_u\cdot(C+D)-4\cdot B\cdot C^2\cdot N_u{}^2\right]}+\sqrt{N_u}\cdot\sqrt{B}\cdot E\cdot(C+D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{B}\cdot C\cdot N_u{}^{\frac{3}{2}}\cdot\sqrt{\left[\sqrt{-N_u\cdot\left[4\cdot B\cdot C^2\cdot N_u{}^2-B\cdot E^2\cdot(C+D)^2+4\cdot A\cdot C\cdot E\cdot N_u\cdot(C+D)\right]}+\sqrt{B}\cdot E\cdot\sqrt{N_u}\cdot(C+D)\right]^2}}{\left[\sqrt{-N_u\cdot\left[4\cdot B\cdot C^2\cdot N_u{}^2-B\cdot E^2\cdot(C+D)^2+4\cdot A\cdot C\cdot E\cdot N_u\cdot(C+D)\right]}+\sqrt{B}\cdot E\cdot\sqrt{N_u}\cdot(C+D)\right]\cdot\sqrt{B\cdot C^2\cdot N_u{}^3}} = 0$$

4RST6AB2R1

Unit.

$AB := 1$

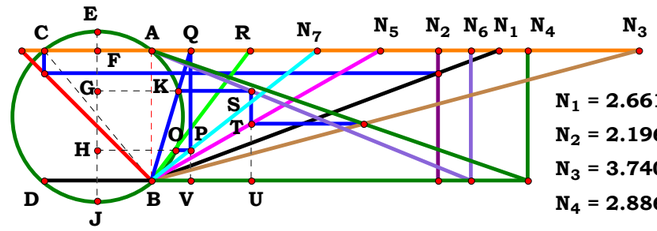
Given.

$N_1 := 2.66100$ $N_4 := 2.88613$

$N_2 := 2.19608$ $N_5 := 1.75720$

$N_3 := 3.74085$ $N_6 := 2.45050$

$N_7 := 1.27081$



$N_1 = 2.66100$ $N_5 = 1.75720$

$N_2 = 2.19608$ $N_6 = 2.45050$

$N_3 = 3.74085$ $N_7 = 1.27081$

$N_4 = 2.88613$ $R = 0.75792$

Descriptions.

$AC := \frac{N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$TU := \frac{N_4}{N_3 + N_4}$

$BU := N_5 \cdot TU$

$SU := \frac{N_6 - BU}{N_6}$

$GJ := SU + EF$

$GK := \sqrt{GJ \cdot (EJ - GJ)}$

$AQ := \frac{GK - AF}{SU}$

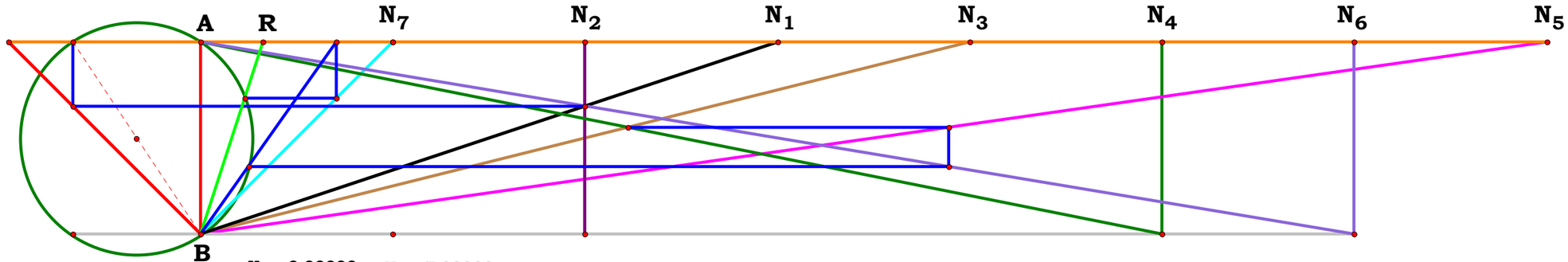
$PV := \frac{AQ}{N_7}$

$HJ := PV + EF$

$HO := \sqrt{HJ \cdot (EJ - HJ)}$

$R := \frac{HO - AF}{PV}$

$R = 0.757925$



$N_1 = 3.00000$ $N_5 = 7.00000$ $AB = 1.00000$ $EF = 0.10093$ $GJ = 0.45278$ $HJ = 0.80873$

$N_2 = 2.00000$ $N_6 = 6.00000$ $AC = 0.66667$ $TU = 0.55556$ $GK = 0.58238$ $HO = 0.56385$

$N_3 = 4.00000$ $N_7 = 1.00000$ $EJ = 1.20185$ $BU = 3.88889$ $AQ = 0.70781$ $R - \frac{HO - AF}{PV} = 0.00000$

$N_4 = 5.00000$ $R = 0.32568$ $AF = 0.33333$ $SU = 0.35185$ $PV = 0.70781$

4RST6AB2R2

Unit.

$AB := 1$

Given.

$N_1 := 1.04347$

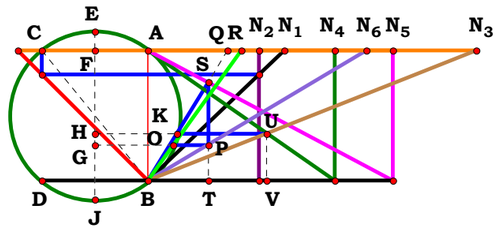
$N_2 := .84976$

$N_3 := 2.52044$

$N_4 := 1.43327$

$N_5 := 1.88311$

$N_6 := 1.67564$



N_1 = 1.04347 N_5 = 1.88311

N_2 = 0.84976 N_6 = 1.67564

N_3 = 2.52044 R = 0.71485

N_4 = 1.43327

Descriptions.

$AC := \frac{N_2}{N_1}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

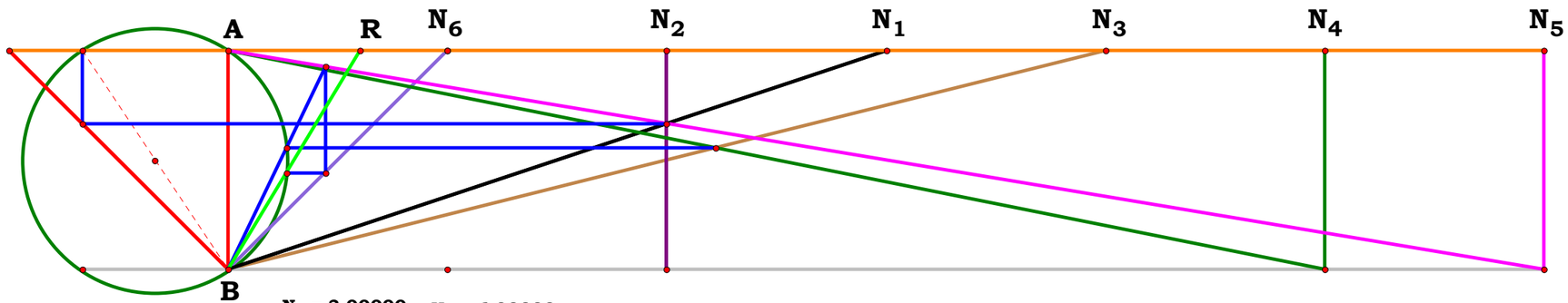
$UV := \frac{N_4}{N_3 + N_4}$ $HJ := UV + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $AQ := \frac{HK - AF}{UV}$

$BT := \frac{AQ \cdot N_5}{AQ + N_5}$ $PT := \frac{BT}{N_6}$

$GJ := PT + EF$ $GO := \sqrt{GJ \cdot (EJ - GJ)}$

$R := \frac{GO - AF}{PT}$ $R = 0.714844$

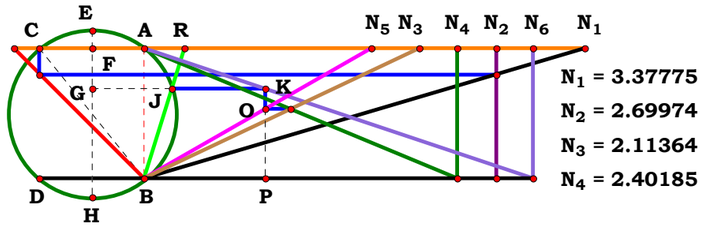


N_1 = 3.00000 N_5 = 6.00000 AB = 1.00000 EF = 0.10093 AQ = 0.47703 GO = 0.59811

N_2 = 2.00000 N_6 = 1.00000 AC = 0.66667 UV = 0.55556 BT = 0.44190 $R-\frac{GO-AF}{PT}$ = 0.00000

N_3 = 4.00000 R = 0.59918 EJ = 1.20185 HJ = 0.65648 PT = 0.44190

N_4 = 5.00000 AF = 0.33333 HK = 0.59835 GJ = 0.54282



$N_5 = 1.74751$
$N_6 = 2.98322$
$R = 0.30808$

Unit. $AB := 1$ Given. $N_1 := 3.37775$ $N_2 := 2.69974$ $N_3 := 2.11364$

$N_4 := 2.40185$ $N_5 := 1.74751$ $N_6 := 2.98322$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{\sqrt{A^2 \cdot E^2 \cdot (C+D)^2 - 4 \cdot B^2 \cdot C^2 \cdot F^2 + 4 \cdot B^2 \cdot C \cdot E \cdot F \cdot (C+D)} - A \cdot E \cdot (C+D)}{2 \cdot B \cdot (C \cdot E - C \cdot F + D \cdot E)} = 0.308084$$

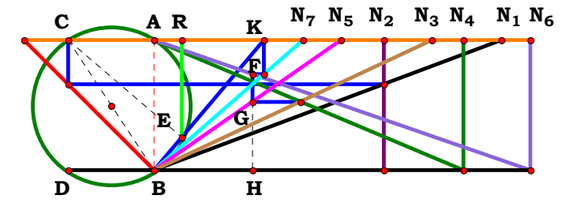
$$Num := \frac{\sqrt{A^2 \cdot E^2 \cdot (C+D)^2 - 4 \cdot B^2 \cdot C^2 \cdot F^2 + 4 \cdot B^2 \cdot C \cdot E \cdot F \cdot (C+D)} - A \cdot E \cdot (C+D)}{\sqrt{\left[\sqrt{A^2 \cdot E^2 \cdot (C+D)^2 - 4 \cdot B^2 \cdot C^2 \cdot F^2 + 4 \cdot B^2 \cdot C \cdot E \cdot F \cdot (C+D)} - A \cdot E \cdot (C+D)\right]^2}}$$

$$Den := \frac{2 \cdot B \cdot (C \cdot E - C \cdot F + D \cdot E)}{\sqrt{[2 \cdot B \cdot (C \cdot E - C \cdot F + D \cdot E)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2 \cdot (C \cdot E - C \cdot F + D \cdot E)^2} \cdot \left[\sqrt{A^2 \cdot E^2 \cdot (C+D)^2 - 4 \cdot B^2 \cdot C^2 \cdot F^2 + 4 \cdot B^2 \cdot C \cdot E \cdot F \cdot (C+D)} - A \cdot E \cdot (C+D)\right]}{B \cdot \sqrt{\left[\sqrt{A^2 \cdot E^2 \cdot (C+D)^2 - 4 \cdot B^2 \cdot C^2 \cdot F^2 + 4 \cdot B^2 \cdot C \cdot E \cdot F \cdot (C+D)} - A \cdot E \cdot (C+D)\right]^2} \cdot (C \cdot E - C \cdot F + D \cdot E)} = 0$$

4RST6B2R4



$N_1 = 2.66100$ $N_3 = 2.13301$ $N_5 = 1.43757$ $N_7 = 1.14489$

$N_2 = 1.76022$ $N_4 = 2.37279$ $N_6 = 2.88636$ $R = 0.21754$

Descriptions.

Unit. $AB := 1$ Given. $N_1 := 2.66100$ $N_2 := 1.76022$ $N_3 := 2.13301$ $N_4 := 2.37279$

$N_5 := 1.43757$ $N_6 := 2.88636$ $N_7 := 1.14489$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$$\frac{N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[E \cdot (C + D) \cdot \left(B \cdot G - A \cdot N_u\right) + A \cdot C \cdot F \cdot N_u\right]}{E^2 \cdot B \cdot \left(G^2 + {N_u}^2\right) \cdot (C + D)^2 - 2 \cdot E \cdot B \cdot C \cdot F \cdot {N_u}^2 \cdot (C + D) + B \cdot C^2 \cdot F^2 \cdot {N_u}^2} = 0.217541$$

$$Num := \frac{N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[E \cdot (C + D) \cdot \left(B \cdot G - A \cdot N_u\right) + A \cdot C \cdot F \cdot N_u\right]}{\sqrt{\left[N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[E \cdot (C + D) \cdot \left(B \cdot G - A \cdot N_u\right) + A \cdot C \cdot F \cdot N_u\right]\right]^2}}$$

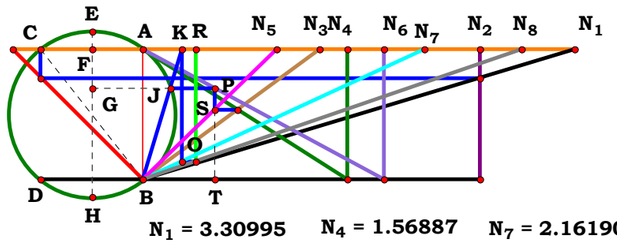
$$Den := \frac{E^2 \cdot B \cdot \left(G^2 + {N_u}^2\right) \cdot (C + D)^2 - 2 \cdot E \cdot B \cdot C \cdot F \cdot {N_u}^2 \cdot (C + D) + B \cdot C^2 \cdot F^2 \cdot {N_u}^2}{\sqrt{\left[E^2 \cdot B \cdot \left(G^2 + {N_u}^2\right) \cdot (C + D)^2 - 2 \cdot E \cdot B \cdot C \cdot F \cdot {N_u}^2 \cdot (C + D) + B \cdot C^2 \cdot F^2 \cdot {N_u}^2\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot [D \cdot E + C \cdot (E - F)] \cdot \sqrt{\left[B \cdot E^2 \cdot \left(G^2 + {N_u}^2\right) \cdot (C + D)^2 + B \cdot C^2 \cdot F^2 \cdot {N_u}^2 - 2 \cdot B \cdot C \cdot E \cdot F \cdot {N_u}^2 \cdot (C + D)\right]^2} \cdot \left[E \cdot (C + D) \cdot \left(B \cdot G - A \cdot N_u\right) + A \cdot C \cdot F \cdot N_u\right]}{\sqrt{{N_u}^2 \cdot [D \cdot E + C \cdot (E - F)]^2 \cdot \left[E \cdot (C + D) \cdot \left(B \cdot G - A \cdot N_u\right) + A \cdot C \cdot F \cdot N_u\right]^2} \cdot \left[B \cdot E^2 \cdot \left(G^2 + {N_u}^2\right) \cdot (C + D)^2 + B \cdot C^2 \cdot F^2 \cdot {N_u}^2 - 2 \cdot B \cdot C \cdot E \cdot F \cdot {N_u}^2 \cdot (C + D)\right]} = 0$$

4RST6B2R5



$N_1 = 3.30995$ $N_4 = 1.56887$ $N_7 = 2.16190$

$N_2 = 2.58351$ $N_5 = 1.03076$ $N_8 = 2.90655$

$N_3 = 1.35815$ $N_6 = 1.84998$ $R = 0.40486$

Descriptions.

Unit. $AB := 1$ **Given.** $N_1 := 3.30995$ $N_2 := 2.58351$ $N_3 := 1.35815$ $N_4 := 1.56887$

$N_5 := 1.03076$ $N_6 := 1.84998$ $N_7 := 2.16190$ $N_8 := 2.90655$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5} \quad F := \frac{N_u}{N_6} \quad G := \frac{N_u}{N_7} \quad H := \frac{N_u}{N_8}$$

$$\frac{G\cdot\left[\sqrt{E^2\cdot A^2\cdot(C+D)^2+4\cdot E\cdot B^2\cdot C\cdot F\cdot(C+D)}-4\cdot B^2\cdot C^2\cdot F^2-A\cdot E\cdot(C+D)\right]}{2\cdot B\cdot H\cdot(C\cdot E-C\cdot F+D\cdot E)} = 0.404856$$

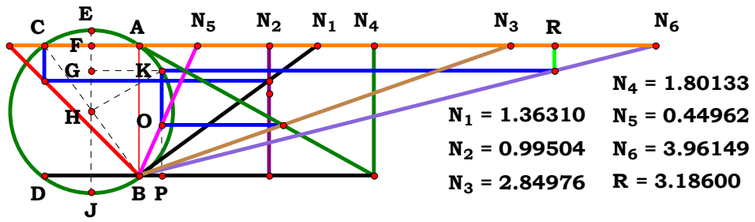
$$Num := \frac{G\cdot\left[\sqrt{E^2\cdot A^2\cdot(C+D)^2+4\cdot E\cdot B^2\cdot C\cdot F\cdot(C+D)}-4\cdot B^2\cdot C^2\cdot F^2-A\cdot E\cdot(C+D)\right]}{\sqrt{\left[G\cdot\left[\sqrt{E^2\cdot A^2\cdot(C+D)^2+4\cdot E\cdot B^2\cdot C\cdot F\cdot(C+D)}-4\cdot B^2\cdot C^2\cdot F^2-A\cdot E\cdot(C+D)\right]\right]^2}}$$

$$Den := \frac{2\cdot B\cdot H\cdot(C\cdot E-C\cdot F+D\cdot E)}{\sqrt{[2\cdot B\cdot H\cdot(C\cdot E-C\cdot F+D\cdot E)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{G\cdot\left[\sqrt{A^2\cdot E^2\cdot(C+D)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}-A\cdot E\cdot(C+D)\right]\cdot\sqrt{B^2\cdot H^2\cdot(C\cdot E-C\cdot F+D\cdot E)^2}}{B\cdot H\cdot\sqrt{G^2\cdot\left[\sqrt{A^2\cdot E^2\cdot(C+D)^2-4\cdot B^2\cdot C^2\cdot F^2+4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)}-A\cdot E\cdot(C+D)\right]^2}\cdot(C\cdot E-C\cdot F+D\cdot E)} = 0$$

4RST6B2R6



$N_4 = 1.80133$ $N_5 = 0.44962$ $N_6 = 3.96149$ $R = 3.18600$

$N_1 = 1.36310$
$N_2 = 0.99504$
$N_3 = 2.84976$

Unit. $AB := 1$ **Given.** $N_1 := 1.36310$ $N_2 := .99504$ $N_3 := 2.84976$

$N_4 := 1.80133$ $N_5 := .44962$ $N_6 := 3.96149$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

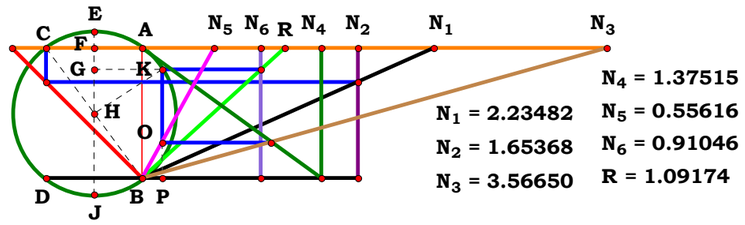
$$\frac{\sqrt{N_u}\cdot\left[\sqrt{-N_u\cdot\left[4\cdot B\cdot C^2\cdot {N_u}^2 - B\cdot E^2\cdot(C+D)^2 + 4\cdot A\cdot C\cdot E\cdot N_u\cdot(C+D)\right]} + \sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]}{2\cdot F\cdot(C+D)\cdot\sqrt{B}\cdot E} = 3.18599$$

$$Num := \frac{\sqrt{N_u}\cdot\left[\sqrt{-N_u\cdot\left[4\cdot B\cdot C^2\cdot {N_u}^2 - B\cdot E^2\cdot(C+D)^2 + 4\cdot A\cdot C\cdot E\cdot N_u\cdot(C+D)\right]} + \sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]}{\sqrt{\left[\sqrt{N_u}\cdot\left[\sqrt{-N_u\cdot\left[4\cdot B\cdot C^2\cdot {N_u}^2 - B\cdot E^2\cdot(C+D)^2 + 4\cdot A\cdot C\cdot E\cdot N_u\cdot(C+D)\right]} + \sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]\right]^2}}$$

$$Den := \frac{2\cdot F\cdot(C+D)\cdot\sqrt{B}\cdot E}{\sqrt{\left[2\cdot F\cdot(C+D)\cdot\sqrt{B}\cdot E\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{N_u}\cdot\left[\sqrt{-N_u\cdot\left[4\cdot B\cdot C^2\cdot {N_u}^2 - B\cdot E^2\cdot(C+D)^2 + 4\cdot A\cdot C\cdot E\cdot N_u\cdot(C+D)\right]} + \sqrt{B}\cdot E\cdot\sqrt{N_u}\cdot(C+D)\right]\cdot\sqrt{B\cdot E^2\cdot F^2\cdot(C+D)^2}}{\sqrt{B}\cdot E\cdot F\cdot(C+D)\cdot\sqrt{N_u\cdot\left[\sqrt{-N_u\cdot\left[4\cdot B\cdot C^2\cdot {N_u}^2 - B\cdot E^2\cdot(C+D)^2 + 4\cdot A\cdot C\cdot E\cdot N_u\cdot(C+D)\right]} + \sqrt{B}\cdot E\cdot\sqrt{N_u}\cdot(C+D)\right]^2}} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 2.23482$ $N_2 := 1.65368$ $N_3 := 3.56650$

$N_4 := 1.37515$ $N_5 := .55616$ $N_6 := .91046$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(C+D)\cdot\sqrt{B}\cdot E}{F\cdot\left[\sqrt{N_u}\cdot\left[E^2\cdot B\cdot(C+D)^2-4\cdot E\cdot A\cdot C\cdot N_u\cdot(C+D)-4\cdot B\cdot C^2\cdot {N_u}^2\right]+\sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]}=1.091738$$

$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(C+D)\cdot\sqrt{B}\cdot E}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^3\cdot(C+D)\cdot\sqrt{B}\cdot E\right]^2}}$$

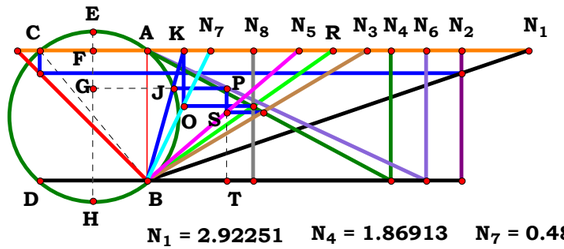
$$Den := \frac{F\cdot\left[\sqrt{N_u}\cdot\left[E^2\cdot B\cdot(C+D)^2-4\cdot E\cdot A\cdot C\cdot N_u\cdot(C+D)-4\cdot B\cdot C^2\cdot {N_u}^2\right]+\sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]}{\sqrt{\left[F\cdot\left[\sqrt{N_u}\cdot\left[E^2\cdot B\cdot(C+D)^2-4\cdot E\cdot A\cdot C\cdot N_u\cdot(C+D)-4\cdot B\cdot C^2\cdot {N_u}^2\right]+\sqrt{B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{B}\cdot E\cdot {N_u}^{\frac{3}{2}}\cdot\sqrt{F^2\cdot\left[\sqrt{-N_u}\cdot\left[4\cdot B\cdot C^2\cdot {N_u}^2-B\cdot E^2\cdot(C+D)^2+4\cdot A\cdot C\cdot E\cdot N_u\cdot(C+D)\right]+\sqrt{B}\cdot E\cdot\sqrt{N_u}\cdot(C+D)\right]^2}\cdot(C+D)}{F\cdot\left[\sqrt{-N_u}\cdot\left[4\cdot B\cdot C^2\cdot {N_u}^2-B\cdot E^2\cdot(C+D)^2+4\cdot A\cdot C\cdot E\cdot N_u\cdot(C+D)\right]+\sqrt{B}\cdot E\cdot\sqrt{N_u}\cdot(C+D)\right]\cdot\sqrt{B\cdot E^2\cdot {N_u}^3\cdot(C+D)^2}}=0$$

4RST6B2R8



$N_1 = 2.92251$ $N_4 = 1.86913$ $N_7 = 0.48626$

$N_2 = 2.40917$ $N_5 = 1.16636$ $N_8 = 0.81709$

$N_3 = 1.68746$ $N_6 = 2.14056$ $R = 1.42068$

Unit. $AB := 1$ **Given.** $N_1 := 2.92251$ $N_2 := 2.40917$ $N_3 := 1.68746$ $N_4 := 1.86913$

$N_5 := 1.16636$ $N_6 := 2.14056$ $N_7 := .48626$ $N_8 := .81709$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

Descriptions.

$$\frac{2\cdot B\cdot N_u{}^2\cdot(C\cdot E - C\cdot F + D\cdot E)}{G\cdot H\cdot\left[\sqrt{E^2\cdot A^2\cdot(C+D)^2 + 4\cdot E\cdot B^2\cdot C\cdot F\cdot(C+D) - 4\cdot B^2\cdot C^2\cdot F^2} - A\cdot E\cdot(C+D)\right]} = 1.420686$$

$$Num := \frac{B\cdot N_u{}^2\cdot(C\cdot E - C\cdot F + D\cdot E)}{\sqrt{\left[B\cdot N_u{}^2\cdot(C\cdot E - C\cdot F + D\cdot E)\right]^2}}$$

$$Den := \frac{G\cdot H\cdot\left[\sqrt{E^2\cdot A^2\cdot(C+D)^2 + 4\cdot E\cdot B^2\cdot C\cdot F\cdot(C+D) - 4\cdot B^2\cdot C^2\cdot F^2} - A\cdot E\cdot(C+D)\right]}{\sqrt{\left[G\cdot H\cdot\left[\sqrt{E^2\cdot A^2\cdot(C+D)^2 + 4\cdot E\cdot B^2\cdot C\cdot F\cdot(C+D) - 4\cdot B^2\cdot C^2\cdot F^2} - A\cdot E\cdot(C+D)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{B\cdot N_u{}^2\cdot\sqrt{G^2\cdot H^2\cdot\left[\sqrt{A^2\cdot E^2\cdot(C+D)^2 - 4\cdot B^2\cdot C^2\cdot F^2 + 4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)} - A\cdot E\cdot(C+D)\right]^2}\cdot(C\cdot E - C\cdot F + D\cdot E)}{G\cdot H\cdot\left[\sqrt{A^2\cdot E^2\cdot(C+D)^2 - 4\cdot B^2\cdot C^2\cdot F^2 + 4\cdot B^2\cdot C\cdot E\cdot F\cdot(C+D)} - A\cdot E\cdot(C+D)\right]\cdot\sqrt{B^2\cdot N_u{}^4\cdot(C\cdot E - C\cdot F + D\cdot E)^2}} = 0$$

4RST6AB2R9

Unit.

$AB := 1$

Given.

$N_1 := 2.09922$

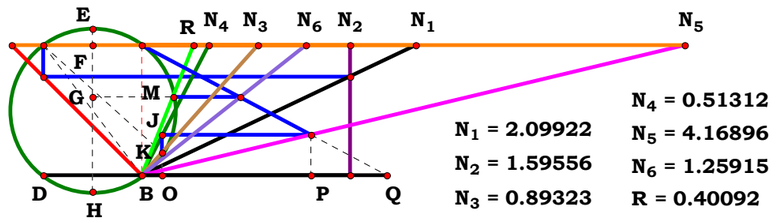
$N_2 := 1.59556$

$N_3 := .89323$

$N_4 := .51312$

$N_5 := 4.16896$

$N_6 := 1.25915$



$N_1 = 2.09922$ $N_4 = 0.51312$

$N_2 = 1.59556$ $N_5 = 4.16896$

$N_3 = 0.89323$ $N_6 = 1.25915$

$R = 0.40092$

Descriptions.

$$AC := \frac{N_2}{N_1} \qquad EH := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EH - AB}{2}$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad CN_3 := N_3 + AC$$

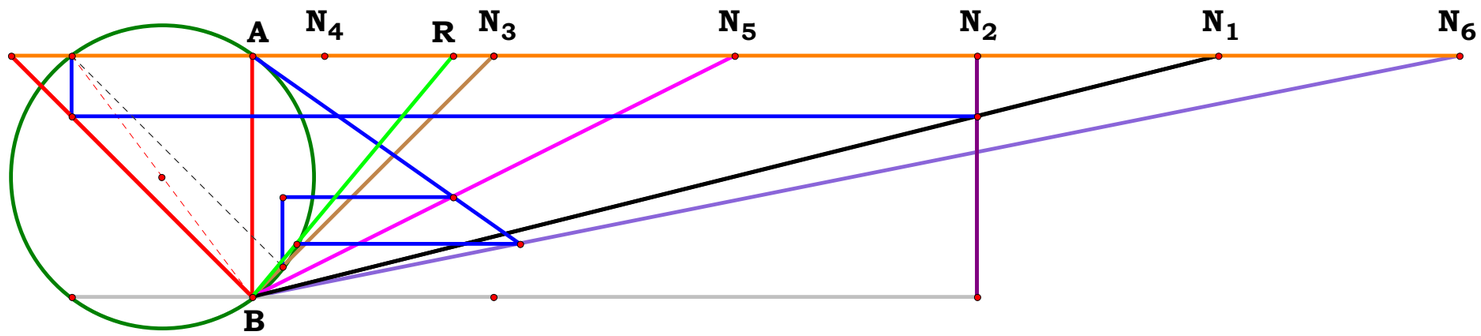
$$KN_3 := \frac{N_3 \cdot CN_3}{BN_3} \qquad BO := \frac{N_3 \cdot (BN_3 - KN_3)}{BN_3}$$

$$JO := \frac{BO}{N_4} \qquad BP := N_5 \cdot JO$$

$$BQ := \frac{BP \cdot AB}{AB - JO} \qquad FG := \frac{N_6}{BQ + N_6}$$

$$EG := FG + EF \qquad GM := \sqrt{EG \cdot (EH - EG)}$$

$$R := \frac{GM - AF}{AB - FG} \qquad R = 0.400923$$



$N_1 = 4.00000$ $N_4 = 0.30000$ $AB = 1.00000$ $EF = 0.12500$ $BO = 0.12500$ $FG = 0.77778$

$N_2 = 3.00000$ $N_5 = 2.00000$ $AC = 0.75000$ $BN_3 = 1.41421$ $JO = 0.41667$ $EG = 0.90278$

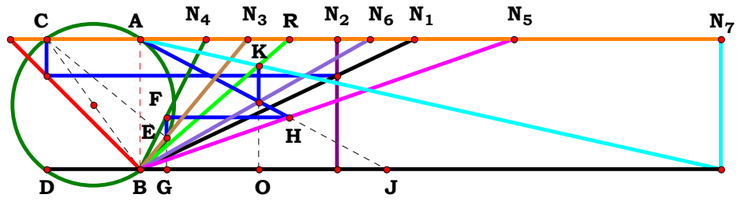
$N_3 = 1.00000$ $N_6 = 5.00000$ $EH = 1.25000$ $CN_3 = 1.75000$ $BP = 0.83333$ $GM = 0.55988$

$R = 0.83196$ $AF = 0.37500$ $KN_3 = 1.23744$ $BQ = 1.42857$ $R - \frac{GM-AF}{AB-FG} = 0.00000$

Definitions.

$$R - \frac{+ -\sqrt{N_1^4} \cdot N_2 \cdot \left[N_1 \cdot N_4 \cdot N_6 \cdot \left(N_3^2 + 1\right) + N_3 \cdot \left(N_5 - N_6\right) \cdot \left(N_1 - N_2 \cdot N_3\right)\right]}{2 \cdot N_1 \cdot N_3 \cdot N_5 \cdot \left(N_1 - N_2 \cdot N_3\right) \cdot \sqrt{N_1^4}} = 0$$

$$\sqrt{N_1^2 \cdot N_2^2 \cdot N_4^2 \cdot N_6^2 \cdot \left(N_3^2 + 1\right)^2 - N_3^2 \cdot \left(N_1 - N_2 \cdot N_3\right)^2 \cdot \left[2 \cdot N_5 \cdot N_6 \cdot \left(2 \cdot N_1^2 + N_2^2\right) - N_2^2 \cdot \left(N_5^2 + N_6^2\right)\right] \ \ldots \ } \cdot N_1^2 \ \ldots$$
$$+ \ 2 \cdot N_1 \cdot N_3 \cdot N_4 \cdot N_6 \cdot \left(N_1 - N_2 \cdot N_3\right) \cdot \left(N_3^2 + 1\right) \cdot \left(2 \cdot N_1^2 \cdot N_5 + N_2^2 \cdot N_5 - N_2^2 \cdot N_6\right)$$



$N_1 = 2.09922$ $N_3 = 0.82543$ $N_5 = 2.87106$ $N_7 = 4.45743$

$N_2 = 1.50839$ $N_4 = 0.50343$ $N_6 = 1.76281$ $R = 1.14623$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.50839$ $N_3 := .82543$ $N_4 := .50343$

$N_5 := 2.87106$ $N_6 := 1.76281$ $N_7 := 4.45743$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.

$$\frac{D \cdot N_u \cdot (B \cdot C - A \cdot N_u)}{E \cdot [B \cdot C \cdot (C - D) + N_u \cdot (A \cdot D + B \cdot N_u)] + D \cdot (F - G) \cdot (B \cdot C - A \cdot N_u)} = 1.146228$$

$$Num := \frac{D \cdot N_u \cdot (B \cdot C - A \cdot N_u)}{\sqrt{[D \cdot N_u \cdot (B \cdot C - A \cdot N_u)]^2}}$$

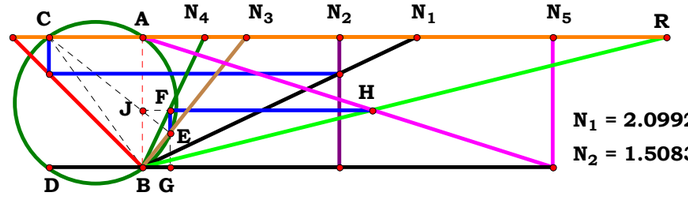
$$Den := \frac{E \cdot [B \cdot C \cdot (C - D) + N_u \cdot (A \cdot D + B \cdot N_u)] + D \cdot (F - G) \cdot (B \cdot C - A \cdot N_u)}{\sqrt{[E \cdot [B \cdot C \cdot (C - D) + N_u \cdot (A \cdot D + B \cdot N_u)] + D \cdot (F - G) \cdot (B \cdot C - A \cdot N_u)]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot N_u \cdot \sqrt{[E \cdot [N_u \cdot (A \cdot D + B \cdot N_u) + B \cdot C \cdot (C - D)] + D \cdot (B \cdot C - A \cdot N_u) \cdot (F - G)]^2} \cdot (B \cdot C - A \cdot N_u)}{[E \cdot [N_u \cdot (A \cdot D + B \cdot N_u) + B \cdot C \cdot (C - D)] + D \cdot (B \cdot C - A \cdot N_u) \cdot (F - G)] \cdot \sqrt{D^2 \cdot {N_u}^2 \cdot (B \cdot C - A \cdot N_u)^2}} = 0$$

4RST6B2R11



$N_3 = 0.79637$
$N_4 = 0.47437$
$N_1 = 2.09922$ $N_5 = 3.15195$
$N_2 = 1.50839$ $R = 4.02072$

Unit. $AB := 1$ **Given.** $N_1 := 2.09922$ $N_2 := 1.50839$ $N_3 := .79637$

$N_4 := .47437$ $N_5 := 3.15195$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left[B \cdot C \cdot (C - D) + B \cdot N_u^{\,2} + A \cdot D \cdot N_u\right]}{D \cdot E \cdot \left(B \cdot C - A \cdot N_u\right)} = 4.02067$$

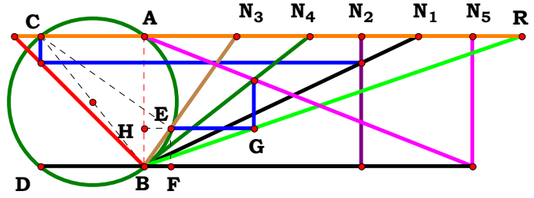
$$Num := \frac{N_u \cdot \left[B \cdot C \cdot (C - D) + B \cdot N_u^{\,2} + A \cdot D \cdot N_u\right]}{\sqrt{\left[N_u \cdot \left[B \cdot C \cdot (C - D) + B \cdot N_u^{\,2} + A \cdot D \cdot N_u\right]\right]^2}}$$

$$Den := \frac{D \cdot E \cdot \left(B \cdot C - A \cdot N_u\right)}{\sqrt{\left[D \cdot E \cdot \left(B \cdot C - A \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[B \cdot N_u^{\,2} + A \cdot D \cdot N_u + B \cdot C \cdot (C - D)\right] \cdot \sqrt{D^2 \cdot E^2 \cdot \left(B \cdot C - A \cdot N_u\right)^2}}{D \cdot E \cdot \sqrt{N_u^{\,2} \cdot \left[B \cdot N_u^{\,2} + A \cdot D \cdot N_u + B \cdot C \cdot (C - D)\right]^2} \cdot \left(B \cdot C - A \cdot N_u\right)} = 0$$

4RST6B2R12



$N_1 = 2.09922$
$N_2 = 1.66336$
$N_3 = 0.70920$
$N_4 = 1.26861$
$N_5 = 2.52237$
$R = 2.89606$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.66336$ $N_3 := .70920$

$N_4 := 1.26861$ $N_5 := 2.52237$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{C \cdot (D + E) \cdot \left(B \cdot C - A \cdot N_u\right)} = 2.896074$$

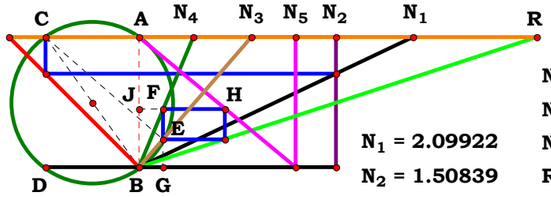
$$Num := \frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{C \cdot (D + E) \cdot \left(B \cdot C - A \cdot N_u\right)}{\sqrt{\left[C \cdot (D + E) \cdot \left(B \cdot C - A \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{C^2 \cdot (D + E)^2 \cdot \left(B \cdot C - A \cdot N_u\right)^2}}{C \cdot (D + E) \cdot \left(B \cdot C - A \cdot N_u\right) \cdot \sqrt{B^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST6B2R13



$N_3 = 0.86417$
$N_4 = 0.41626$
$N_5 = 1.20511$
$N_1 = 2.09922$
$N_2 = 1.50839$
$R = 3.05165$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.50839$ $N_3 := .86417$

$N_4 := .41626$ $N_5 := 1.20511$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(B \cdot C^2 - B \cdot D \cdot C + B \cdot N_u^{\,2} + A \cdot D \cdot N_u\right)}{C \cdot E \cdot \left(B \cdot C - A \cdot N_u\right)} = 3.051666$$

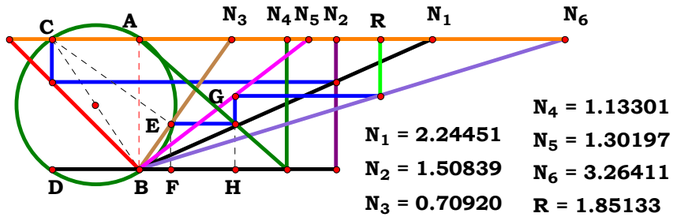
$$Num := \frac{N_u \cdot \left(B \cdot C^2 - B \cdot D \cdot C + B \cdot N_u^{\,2} + A \cdot D \cdot N_u\right)}{\sqrt{\left[N_u \cdot \left(B \cdot C^2 - B \cdot D \cdot C + B \cdot N_u^{\,2} + A \cdot D \cdot N_u\right)\right]^2}}$$

$$Den := \frac{C \cdot E \cdot \left(B \cdot C - A \cdot N_u\right)}{\sqrt{\left[C \cdot E \cdot \left(B \cdot C - A \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{C^2 \cdot E^2 \cdot \left(B \cdot C - A \cdot N_u\right)^2} \cdot \left(B \cdot C^2 - B \cdot D \cdot C + B \cdot N_u^{\,2} + A \cdot D \cdot N_u\right)}{C \cdot E \cdot \left(B \cdot C - A \cdot N_u\right) \cdot \sqrt{N_u^{\,2} \cdot \left(B \cdot C^2 - B \cdot D \cdot C + B \cdot N_u^{\,2} + A \cdot D \cdot N_u\right)^2}} = 0$$

4RST6B2R14



$N_1 = 2.24451$
$N_2 = 1.50839$
$N_3 = 0.70920$
$N_4 = 1.13301$
$N_5 = 1.30197$
$N_6 = 3.26411$
$R = 1.85133$

Unit. $AB := 1$ Given. $N_1 := 2.24451$ $N_2 := 1.50839$ $N_3 := .70920$

$N_4 := 1.13301$ $N_5 := 1.30197$ $N_6 := 3.26411$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{E \cdot N_u^{\,2} \cdot (A \cdot C + B \cdot N_u)}{F \cdot \left[B \cdot D \cdot \left(C^2 + N_u^{\,2}\right)\right]} = 1.851336$$

$$Num := \frac{E \cdot N_u^{\,2} \cdot (A \cdot C + B \cdot N_u)}{\sqrt{\left[E \cdot N_u^{\,2} \cdot (A \cdot C + B \cdot N_u)\right]^2}}$$

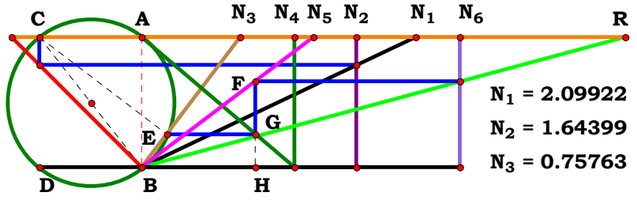
$$Den := \frac{F \cdot \left[B \cdot D \cdot \left(C^2 + N_u^{\,2}\right)\right]}{\sqrt{\left[F \cdot \left[B \cdot D \cdot \left(C^2 + N_u^{\,2}\right)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{E \cdot N_u^{\,2} \cdot (A \cdot C + B \cdot N_u) \cdot \sqrt{B^2 \cdot D^2 \cdot F^2 \cdot \left(C^2 + N_u^{\,2}\right)^2}}{B \cdot D \cdot F \cdot \left(C^2 + N_u^{\,2}\right) \cdot \sqrt{E^2 \cdot N_u^{\,4} \cdot (A \cdot C + B \cdot N_u)^2}} = 0$$

4RST6B2R15



$N_1 = 2.09922$
$N_2 = 1.64399$
$N_3 = 0.75763$
$N_4 = 1.17175$
$N_5 = 1.32134$
$N_6 = 2.44082$
$R = 3.71129$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.64399$ $N_3 := .75763$

$N_4 := 1.17175$ $N_5 := 1.32134$ $N_6 := 2.44082$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{B \cdot D \cdot \left(C^2 + N_u{}^2\right)}{E \cdot F \cdot \left(A \cdot C + B \cdot N_u\right)} = 3.711292$$

$$Num := \frac{B \cdot D \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[B \cdot D \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

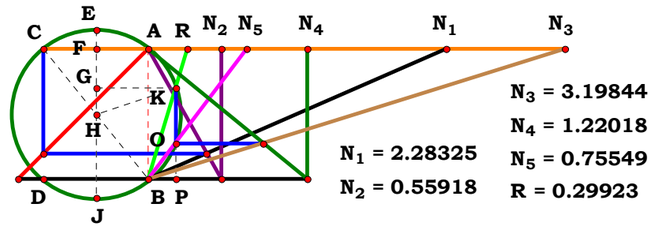
$$Den := \frac{E \cdot F \cdot \left(A \cdot C + B \cdot N_u\right)}{\sqrt{\left[E \cdot F \cdot \left(A \cdot C + B \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{B \cdot D \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{E^2 \cdot F^2 \cdot \left(A \cdot C + B \cdot N_u\right)^2}}{E \cdot F \cdot \left(A \cdot C + B \cdot N_u\right) \cdot \sqrt{B^2 \cdot D^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST6B3R0



Unit. $AB := 1$ Given. $N_1 := 2.28325$ $N_2 := .55918$ $N_3 := 3.19844$

$N_4 := 1.22018$ $N_5 := .75549$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{2 \cdot C \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot \sqrt{B} \cdot \sqrt{A}}{\sqrt{A \cdot B} \cdot \sqrt{N_u \cdot \left[E^2 \cdot (C+D)^2 \cdot (A+B) - \left[4 \cdot C \cdot N_u \cdot \left[B \cdot E \cdot (C+D) + C \cdot N_u \cdot (A+B)\right]\right]\right]} + \sqrt{\left[N_u \cdot (A+B)\right]} \cdot \sqrt{B} \cdot \sqrt{A} \cdot E \cdot (C+D)} = 0.299227$$

$$Num := \frac{2 \cdot C \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot \sqrt{B} \cdot \sqrt{A}}{\sqrt{\left[2 \cdot C \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot \sqrt{B} \cdot \sqrt{A}\right]^2}}$$

$$Den := \frac{\sqrt{A \cdot B} \cdot \sqrt{N_u \cdot \left[E^2 \cdot (C+D)^2 \cdot (A+B) - \left[4 \cdot C \cdot N_u \cdot \left[B \cdot E \cdot (C+D) + C \cdot N_u \cdot (A+B)\right]\right]\right]} + \sqrt{\left[N_u \cdot (A+B)\right]} \cdot \sqrt{B} \cdot \sqrt{A} \cdot E \cdot (C+D)}{\sqrt{\left[\sqrt{A \cdot B} \cdot \sqrt{N_u \cdot \left[E^2 \cdot (C+D)^2 \cdot (A+B) - \left[4 \cdot C \cdot N_u \cdot \left[B \cdot E \cdot (C+D) + C \cdot N_u \cdot (A+B)\right]\right]\right]} + \sqrt{\left[N_u \cdot (A+B)\right]} \cdot \sqrt{B} \cdot \sqrt{A} \cdot E \cdot (C+D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A} \cdot \sqrt{B} \cdot C \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot \sqrt{\left[\sqrt{A \cdot B} \cdot \sqrt{N_u \cdot \left[E^2 \cdot (A+B) \cdot (C+D)^2 - 4 \cdot C \cdot N_u \cdot \left[B \cdot E \cdot (C+D) + C \cdot N_u \cdot (A+B)\right]\right]} + \sqrt{A} \cdot \sqrt{B} \cdot E \cdot \sqrt{N_u \cdot (A+B)} \cdot (C+D)\right]^2}}{\left[\sqrt{A \cdot B} \cdot \sqrt{N_u \cdot \left[E^2 \cdot (A+B) \cdot (C+D)^2 - 4 \cdot C \cdot N_u \cdot \left[B \cdot E \cdot (C+D) + C \cdot N_u \cdot (A+B)\right]\right]} + \sqrt{A} \cdot \sqrt{B} \cdot E \cdot \sqrt{N_u \cdot (A+B)} \cdot (C+D)\right] \cdot \sqrt{A \cdot B \cdot C^2 \cdot {N_u}^3 \cdot (A+B)}} = 0$$

4RST6AB3R1

Unit.

$AB := 1$

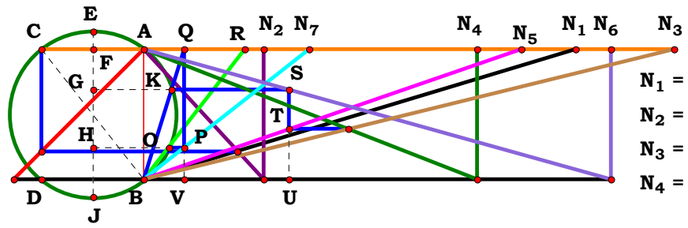
Given.

$N_1 := 3.330995$ $N_4 := 2.55682$

$N_2 := .91756$ $N_5 := 2.89605$

$N_3 := 4.07016$ $N_7 := 1.26704$

$N_6 := 3.58480$



$N_1 = 3.30995$ $N_5 = 2.89605$

$N_2 = 0.91756$ $N_6 = 3.58480$

$N_3 = 4.07016$ $N_7 = 1.26704$

$N_4 = 2.55682$ $R = 0.77383$

Descriptions.

$AC := \dfrac{N_1}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \dfrac{AC}{2}$ $EF := \dfrac{EJ - AB}{2}$

$TU := \dfrac{N_4}{N_3 + N_4}$ $BU := N_5 \cdot TU$

$SU := \dfrac{N_6 - BU}{N_6}$

$GJ := SU + EF$

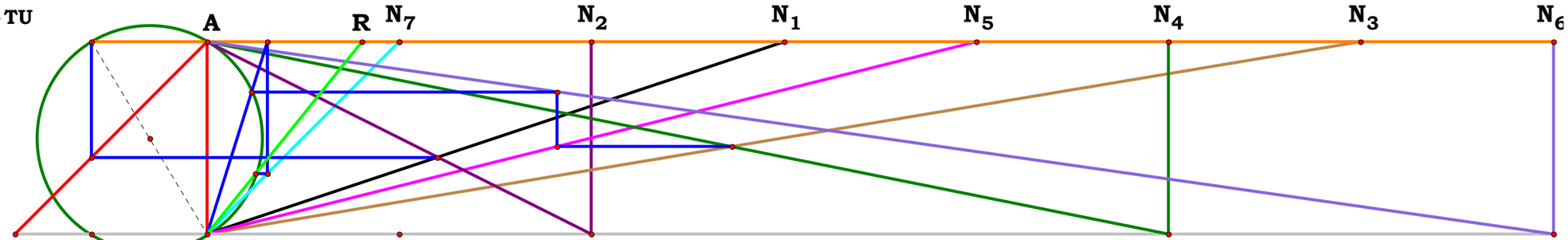
$GK := \sqrt{GJ \cdot (EJ - GJ)}$

$AQ := \dfrac{GK - AF}{SU}$

$PV := \dfrac{AQ}{N_7}$ $HJ := PV + EF$

$HO := \sqrt{HJ \cdot (EJ - HJ)}$ $R := \dfrac{HO - AF}{PV}$

$R = 0.77342$



$N_1 = 3.00000$
$N_2 = 2.00000$
$N_3 = 6.00000$
$N_4 = 5.00000$
$N_5 = 4.00000$
$N_6 = 7.00000$
$N_7 = 1.00000$
$R = 0.80688$

$\dfrac{N_1}{N_1+N_2} = 0.60000$

$\sqrt{1^2+AC^2} = 1.16619$

$\dfrac{AC}{2} = 0.30000$

$\dfrac{EJ-1}{2} = 0.08310$

$\dfrac{N_4}{N_3+N_4} = 0.45455$

$N_5 \cdot TU = 1.81818$

$\dfrac{N_6-BU}{N_6} = 0.74026$

$SU+EF = 0.82335$

$\sqrt{GJ \cdot (EJ-GJ)} = 0.53130$

$\dfrac{GK-AF}{SU} = 0.31245$

$\dfrac{AQ}{N_7} = 0.31245$

$PV+EF = 0.39555$

$\sqrt{HJ \cdot (EJ-HJ)} = 0.55211$

$R - \dfrac{HO-AF}{PV} = 0.00000$

$AC = 0.60000$
$EJ = 1.16619$
$AF = 0.30000$
$EF = 0.08310$
$TU = 0.45455$
$BU = 1.81818$

$SU = 0.74026$
$GJ = 0.82335$
$GK = 0.53130$
$AQ = 0.31245$
$PV = 0.31245$
$HJ = 0.39555$
$HO = 0.55211$

4RST6AB3R2

Unit.

$AB := 1$

Given.

$N_1 := 2.49634$

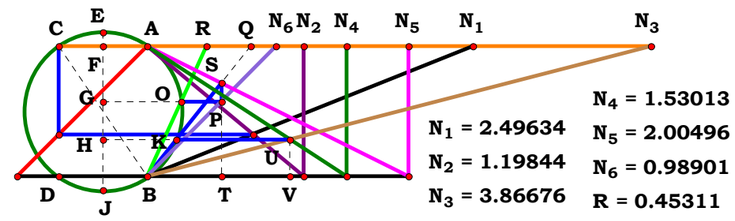
$N_2 := 1.19844$

$N_3 := 3.86676$

$N_4 := 1.53013$

$N_5 := 2.00496$

$N_6 := .98901$



$N_1 = 2.49634$
$N_2 = 1.19844$
$N_3 = 3.86676$
$N_4 = 1.53013$
$N_5 = 2.00496$
$N_6 = 0.98901$
$R = 0.45311$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

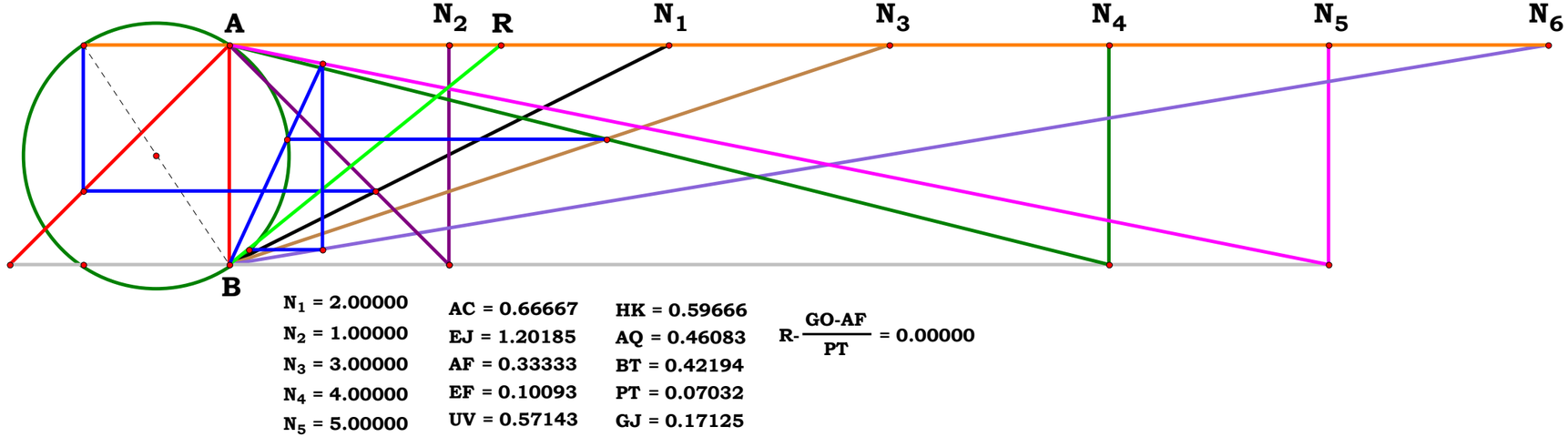
$$UV := \frac{N_4}{N_3 + N_4} \qquad HJ := UV + EF$$

$$HK := \sqrt{HJ \cdot (EJ - HJ)} \qquad AQ := \frac{HK - AF}{UV}$$

$$BT := \frac{AQ \cdot N_5}{AQ + N_5} \qquad PT := \frac{BT}{N_6}$$

$$GJ := PT + EF \qquad GO := \sqrt{GJ \cdot (EJ - GJ)}$$

$$R := \frac{GO - AF}{PT} \qquad R = 0.453111$$

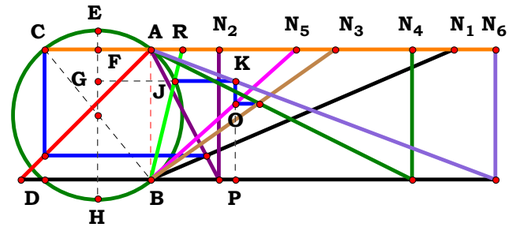


$N_1 = 2.00000$
$N_2 = 1.00000$
$N_3 = 3.00000$
$N_4 = 4.00000$
$N_5 = 5.00000$
$N_6 = 6.00000$
$R = 1.23391$

$AC = 0.66667$
$EJ = 1.20185$
$AF = 0.33333$
$EF = 0.10093$
$UV = 0.57143$
$HJ = 0.67235$

$HK = 0.59666$
$AQ = 0.46083$
$BT = 0.42194$
$PT = 0.07032$
$GJ = 0.17125$
$GO = 0.42011$

$R - \frac{GO - AF}{PT} = 0.00000$



$N_1 = 2.32200$
$N_2 = 0.52044$
$N_3 = 1.41626$
$N_4 = 2.00473$
$N_5 = 1.11387$
$N_6 = 2.64528$
$R = 0.24618$

Unit. $AB := 1$ **Given.** $N_1 := 2.32200$ $N_2 := .52044$ $N_3 := 1.41626$ $N_4 := 2.00473$ $N_5 := 1.11387$ $N_6 := 2.64528$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5} \quad F := \frac{N_u}{N_6}$$

Descriptions.

$$\frac{\sqrt{4\cdot C\cdot F\cdot (A+B)^2\cdot [C\cdot (E-F)+D\cdot E]+B^2\cdot E^2\cdot (C+D)^2}-B\cdot E\cdot (C+D)}{2\cdot (A+B)\cdot (C\cdot E-C\cdot F+D\cdot E)} = 0.24618$$

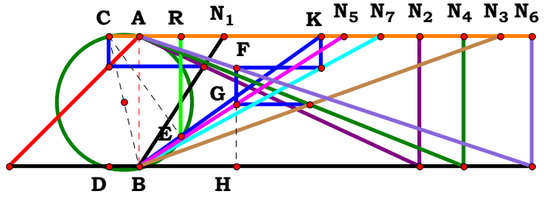
$$Num := \frac{\sqrt{4\cdot C\cdot F\cdot (A+B)^2\cdot [C\cdot (E-F)+D\cdot E]+B^2\cdot E^2\cdot (C+D)^2}-B\cdot E\cdot (C+D)}{\sqrt{\left[\sqrt{4\cdot C\cdot F\cdot (A+B)^2\cdot [C\cdot (E-F)+D\cdot E]+B^2\cdot E^2\cdot (C+D)^2}-B\cdot E\cdot (C+D)\right]^2}}$$

$$Den := \frac{2\cdot (A+B)\cdot (C\cdot E-C\cdot F+D\cdot E)}{\sqrt{[2\cdot (A+B)\cdot (C\cdot E-C\cdot F+D\cdot E)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{(2\cdot A+2\cdot B)^2\cdot (C\cdot E-C\cdot F+D\cdot E)^2}\cdot \left[\sqrt{4\cdot C\cdot F\cdot (A+B)^2\cdot [C\cdot (E-F)+D\cdot E]+B^2\cdot E^2\cdot (C+D)^2}-B\cdot E\cdot (C+D)\right]}{2\cdot (A+B)\cdot \sqrt{\left[\sqrt{B^2\cdot E^2\cdot (C+D)^2+4\cdot C\cdot F\cdot [D\cdot E+C\cdot (E-F)]\cdot (A+B)^2}-B\cdot E\cdot (C+D)\right]^2}\cdot (C\cdot E-C\cdot F+D\cdot E)} = 0$$

4RST6B3R4



$N_1 = 0.64635$ $N_4 = 2.48902$ $N_7 = 1.84818$

$N_2 = 2.14765$ $N_5 = 1.56910$ $R = 0.32109$

$N_3 = 2.77227$ $N_6 = 3.01334$

Descriptions.

Unit. $AB := 1$ Given. $N_1 := .64635$ $N_2 := 2.14765$ $N_3 := 2.77227$ $N_4 := 2.48902$

$N_5 := 1.56910$ $N_6 := 3.01334$ $N_7 := 1.84818$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

$$\frac{N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[G \cdot E \cdot (C + D) \cdot (A + B) - B \cdot N_u \cdot [C \cdot (E - F) + D \cdot E]\right]}{(A + B) \cdot \left[G^2 \cdot E^2 \cdot (C + D)^2 + N_u{}^2 \cdot (C \cdot E - C \cdot F + D \cdot E)^2\right]} = 0.321095$$

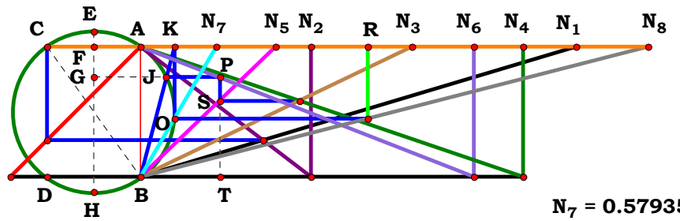
$$Num := \frac{N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[G \cdot E \cdot (C + D) \cdot (A + B) - B \cdot N_u \cdot [C \cdot (E - F) + D \cdot E]\right]}{\sqrt{\left[N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[G \cdot E \cdot (C + D) \cdot (A + B) - B \cdot N_u \cdot [C \cdot (E - F) + D \cdot E]\right]\right]^2}}$$

$$Den := \frac{(A + B) \cdot \left[G^2 \cdot E^2 \cdot (C + D)^2 + N_u{}^2 \cdot (C \cdot E - C \cdot F + D \cdot E)^2\right]}{\sqrt{\left[(A + B) \cdot \left[G^2 \cdot E^2 \cdot (C + D)^2 + N_u{}^2 \cdot (C \cdot E - C \cdot F + D \cdot E)^2\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[G \cdot E \cdot (C + D) \cdot (A + B) - B \cdot N_u \cdot [C \cdot (E - F) + D \cdot E]\right] \cdot \sqrt{\left[N_u{}^2 \cdot (C \cdot E - C \cdot F + D \cdot E)^2 + E^2 \cdot G^2 \cdot (C + D)^2\right]^2 \cdot (A + B)^2}}{\left[N_u{}^2 \cdot (C \cdot E - C \cdot F + D \cdot E)^2 + E^2 \cdot G^2 \cdot (C + D)^2\right] \cdot (A + B) \cdot \sqrt{\left[N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[G \cdot E \cdot (C + D) \cdot (A + B) - B \cdot N_u \cdot [C \cdot (E - F) + D \cdot E]\right]\right]^2}} = 0$$

4RST6AB3R5



$N_7 = 0.57935$

$N_1 = 3.33900$ $N_3 = 2.08458$ $N_5 = 1.03638$ $N_8 = 3.89782$

$N_2 = 1.30499$ $N_4 = 2.93456$ $N_6 = 2.55810$ $R = 1.73929$

Unit. $AB := 1$ **Given.** $N_1 := 3.33900$ $N_2 := 1.30499$ $N_3 := 2.08458$ $N_4 := 2.93456$

$N_5 := 1.03638$ $N_6 := 2.55810$ $N_7 := .57935$ $N_8 := 3.89782$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

Descriptions.

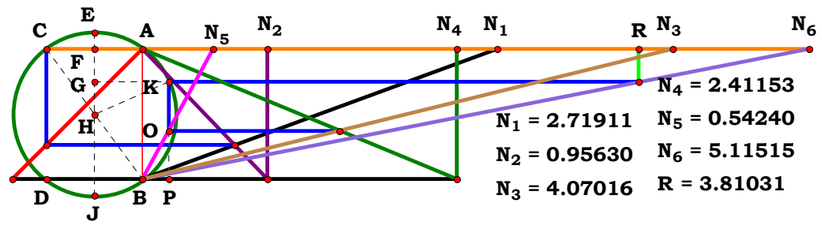
$$\frac{G\cdot\left[B\cdot C\cdot E-\sqrt{B^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot(C\cdot E-C\cdot F+D\cdot E)}+B\cdot D\cdot E\right]}{2\cdot H\cdot(A+B)\cdot[C\cdot(E-F)+D\cdot E]}=-1.739282$$

$$Num := \frac{G\cdot\left[B\cdot C\cdot E-\sqrt{B^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot(C\cdot E-C\cdot F+D\cdot E)}+B\cdot D\cdot E\right]}{\sqrt{\left[G\cdot\left[B\cdot C\cdot E-\sqrt{B^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot(C\cdot E-C\cdot F+D\cdot E)}+B\cdot D\cdot E\right]\right]^2}}$$

$$Den := \frac{2\cdot H\cdot(A+B)\cdot[C\cdot(E-F)+D\cdot E]}{\sqrt{[2\cdot H\cdot(A+B)\cdot[C\cdot(E-F)+D\cdot E]]^2}} \qquad L := \frac{Num}{Den}$$

$Num = -1$ $Den = 1$ $L = -1$

$$L-\frac{G\cdot\sqrt{H^2\cdot[D\cdot E+C\cdot(E-F)]^2\cdot(A+B)^2}\cdot\left[B\cdot C\cdot E-\sqrt{B^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot(C\cdot E-C\cdot F+D\cdot E)}+B\cdot D\cdot E\right]}{H\cdot[D\cdot E+C\cdot(E-F)]\cdot(A+B)\cdot\sqrt{G^2\cdot\left[B\cdot C\cdot E-\sqrt{B^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot(C\cdot E-C\cdot F+D\cdot E)}+B\cdot D\cdot E\right]^2}}=0$$



Unit. $AB := 1$ Given. $N_1 := 2.71911$ $N_2 := .95630$ $N_3 := 4.07016$

$N_4 := 2.41153$ $N_5 := .54240$ $N_6 := 5.11515$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

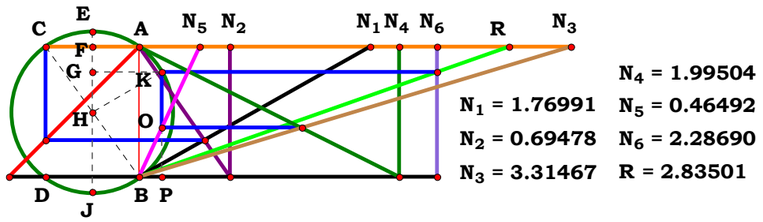
$$\frac{N_u\cdot\left[\sqrt{A\cdot B}\cdot\sqrt{N_u\cdot\left[E^2\cdot(A+B)\cdot(C+D)^2-4\cdot C\cdot N_u\cdot\left[B\cdot E\cdot(C+D)+C\cdot N_u\cdot(A+B)\right]\right]}+\sqrt{\left[N_u\cdot(A+B)\right]}\cdot\sqrt{B}\cdot\sqrt{A}\cdot E\cdot(C+D)\right]}{2\cdot F\cdot(C+D)\cdot\sqrt{\left[N_u\cdot(A+B)\right]}\cdot\sqrt{B}\cdot\sqrt{A}\cdot E}=3.81033$$

$$Num := \frac{N_u\cdot\left[\sqrt{A\cdot B}\cdot\sqrt{N_u\cdot\left[E^2\cdot(A+B)\cdot(C+D)^2-4\cdot C\cdot N_u\cdot\left[B\cdot E\cdot(C+D)+C\cdot N_u\cdot(A+B)\right]\right]}+\sqrt{\left[N_u\cdot(A+B)\right]}\cdot\sqrt{B}\cdot\sqrt{A}\cdot E\cdot(C+D)\right]}{\sqrt{\left[N_u\cdot\left[\sqrt{A\cdot B}\cdot\sqrt{N_u\cdot\left[E^2\cdot(A+B)\cdot(C+D)^2-4\cdot C\cdot N_u\cdot\left[B\cdot E\cdot(C+D)+C\cdot N_u\cdot(A+B)\right]\right]}+\sqrt{\left[N_u\cdot(A+B)\right]}\cdot\sqrt{B}\cdot\sqrt{A}\cdot E\cdot(C+D)\right]\right]^2}}$$

$$Den := \frac{2\cdot F\cdot(C+D)\cdot\sqrt{\left[N_u\cdot(A+B)\right]}\cdot\sqrt{B}\cdot\sqrt{A}\cdot E}{\sqrt{\left[2\cdot F\cdot(C+D)\cdot\sqrt{\left[N_u\cdot(A+B)\right]}\cdot\sqrt{B}\cdot\sqrt{A}\cdot E\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{N_u\cdot\left[\sqrt{A\cdot B}\cdot\sqrt{N_u\cdot\left[E^2\cdot(A+B)\cdot(C+D)^2-4\cdot C\cdot N_u\cdot\left[B\cdot E\cdot(C+D)+C\cdot N_u\cdot(A+B)\right]\right]}+\sqrt{A}\cdot\sqrt{B}\cdot E\cdot\sqrt{N_u\cdot(A+B)}\cdot(C+D)\right]\cdot\sqrt{A\cdot B\cdot E^2\cdot F^2\cdot N_u\cdot(A+B)\cdot(C+D)^2}}{\sqrt{A}\cdot\sqrt{B}\cdot E\cdot F\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u{}^2\cdot\left[\sqrt{A\cdot B}\cdot\sqrt{N_u\cdot\left[E^2\cdot(A+B)\cdot(C+D)^2-4\cdot C\cdot N_u\cdot\left[B\cdot E\cdot(C+D)+C\cdot N_u\cdot(A+B)\right]\right]}+\sqrt{A}\cdot\sqrt{B}\cdot E\cdot\sqrt{N_u\cdot(A+B)}\cdot(C+D)\right]^2}\cdot(C+D)}=0$$



Unit. $AB := 1$ Given. $N_1 := 1.76991$ $N_2 := .69478$ $N_3 := 3.31467$

$N_4 := 1.99504$ $N_5 := .46492$ $N_6 := 2.28690$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2 \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot (C+D) \cdot \sqrt{B} \cdot \sqrt{A} \cdot E}{F \cdot \left[\sqrt{A \cdot B} \cdot \sqrt{-N_u \cdot \left[4 \cdot C^2 \cdot {N_u}^2 \cdot (A+B) - E^2 \cdot (A+B) \cdot (C+D)^2 + 4 \cdot B \cdot C \cdot E \cdot N_u \cdot (C+D) \right]} + \sqrt{\left[N_u \cdot (A+B) \right]} \cdot \sqrt{B} \cdot \sqrt{A} \cdot E \cdot (C+D) \right]} = 2.835018$$

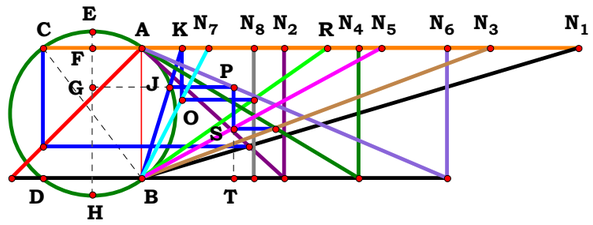
$$Num := \frac{2 \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot (C+D) \cdot \sqrt{B} \cdot \sqrt{A} \cdot E}{\sqrt{\left[2 \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot (C+D) \cdot \sqrt{B} \cdot \sqrt{A} \cdot E \right]^2}}$$

$$Den := \frac{F \cdot \left[\sqrt{A \cdot B} \cdot \sqrt{-N_u \cdot \left[4 \cdot C^2 \cdot {N_u}^2 \cdot (A+B) - E^2 \cdot (A+B) \cdot (C+D)^2 + 4 \cdot B \cdot C \cdot E \cdot N_u \cdot (C+D) \right]} + \sqrt{\left[N_u \cdot (A+B) \right]} \cdot \sqrt{B} \cdot \sqrt{A} \cdot E \cdot (C+D) \right]}{\sqrt{\left[F \cdot \left[\sqrt{A \cdot B} \cdot \sqrt{-N_u \cdot \left[4 \cdot C^2 \cdot {N_u}^2 \cdot (A+B) - E^2 \cdot (A+B) \cdot (C+D)^2 + 4 \cdot B \cdot C \cdot E \cdot N_u \cdot (C+D) \right]} + \sqrt{\left[N_u \cdot (A+B) \right]} \cdot \sqrt{B} \cdot \sqrt{A} \cdot E \cdot (C+D) \right] \right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A} \cdot \sqrt{B} \cdot E \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot \sqrt{F^2 \cdot \left[\sqrt{A \cdot B} \cdot \sqrt{-N_u \cdot \left[4 \cdot C^2 \cdot {N_u}^2 \cdot (A+B) - E^2 \cdot (A+B) \cdot (C+D)^2 + 4 \cdot B \cdot C \cdot E \cdot N_u \cdot (C+D) \right]} + \sqrt{A} \cdot \sqrt{B} \cdot E \cdot \sqrt{N_u \cdot (A+B)} \cdot (C+D) \right]^2} \cdot (C+D)}{F \cdot \left[\sqrt{A \cdot B} \cdot \sqrt{-N_u \cdot \left[4 \cdot C^2 \cdot {N_u}^2 \cdot (A+B) - E^2 \cdot (A+B) \cdot (C+D)^2 + 4 \cdot B \cdot C \cdot E \cdot N_u \cdot (C+D) \right]} + \sqrt{A} \cdot \sqrt{B} \cdot E \cdot \sqrt{N_u \cdot (A+B)} \cdot (C+D) \right] \cdot \sqrt{A \cdot B \cdot E^2 \cdot {N_u}^3 \cdot (A+B) \cdot (C+D)^2}} = 0$$



$N_1 = 3.34869$ $N_4 = 1.66573$ $N_7 = 0.51155$
$N_2 = 1.09190$ $N_5 = 1.84030$ $N_8 = 0.86336$
$N_3 = 2.67541$ $N_6 = 2.34502$ $R = 1.42396$

Unit. $AB := 1$ **Given.** $N_1 := 3.34869$ $N_2 := 1.09190$ $N_3 := 2.67541$ $N_4 := 1.66573$
$N_5 := 1.84030$ $N_6 := 2.34502$ $N_7 := .51155$ $N_8 := .86336$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5} \quad F := \frac{N_u}{N_6} \quad G := \frac{N_u}{N_7} \quad H := \frac{N_u}{N_8}$$

Descriptions.

$$\frac{2\cdot N_u^{\,2}\cdot(A+B)\cdot[C\cdot(F-E)-D\cdot E]}{G\cdot H\cdot\left[B\cdot E\cdot(C+D)-\sqrt{B^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot[C\cdot(E-F)+D\cdot E]}\right]} = 1.423963$$

$$Num := \frac{2\cdot N_u^{\,2}\cdot(A+B)\cdot[C\cdot(F-E)-D\cdot E]}{\sqrt{\left[2\cdot N_u^{\,2}\cdot(A+B)\cdot[C\cdot(F-E)-D\cdot E]\right]^2}}$$

$$Den := \frac{G\cdot H\cdot\left[B\cdot E\cdot(C+D)-\sqrt{B^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot[C\cdot(E-F)+D\cdot E]}\right]}{\sqrt{\left[G\cdot H\cdot\left[B\cdot E\cdot(C+D)-\sqrt{B^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot[C\cdot(E-F)+D\cdot E]}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u^{\,2}\cdot[D\cdot E+C\cdot(E-F)]\cdot(A+B)\cdot\sqrt{G^2\cdot H^2\cdot\left[\sqrt{B^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot[D\cdot E+C\cdot(E-F)]\cdot(A+B)^2}-B\cdot E\cdot(C+D)\right]^2}}{G\cdot H\cdot\left[\sqrt{B^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot[D\cdot E+C\cdot(E-F)]\cdot(A+B)^2}-B\cdot E\cdot(C+D)\right]\cdot\sqrt{N_u^{\,4}\cdot[D\cdot E+C\cdot(E-F)]^2\cdot(A+B)^2}} = 0$$

4RST6AB2R9

Unit.

$AB := 1$

Given.

$N_1 := 1.59556$

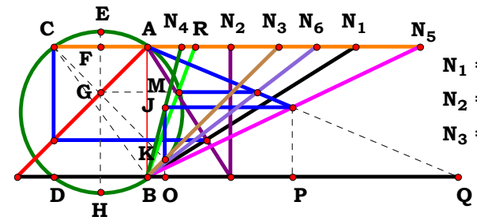
$N_2 := .63667$

$N_3 := 1.00946$

$N_4 := .26129$

$N_5 := 2.09213$

$N_6 := 1.29895$



$N_1 = 1.59556$ $N_4 = 0.26129$

$N_2 = 0.63667$ $N_5 = 2.09213$

$N_3 = 1.00946$ $N_6 = 1.29895$

$R = 0.36947$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EH - AB}{2}$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad CN_3 := N_3 + AC$$

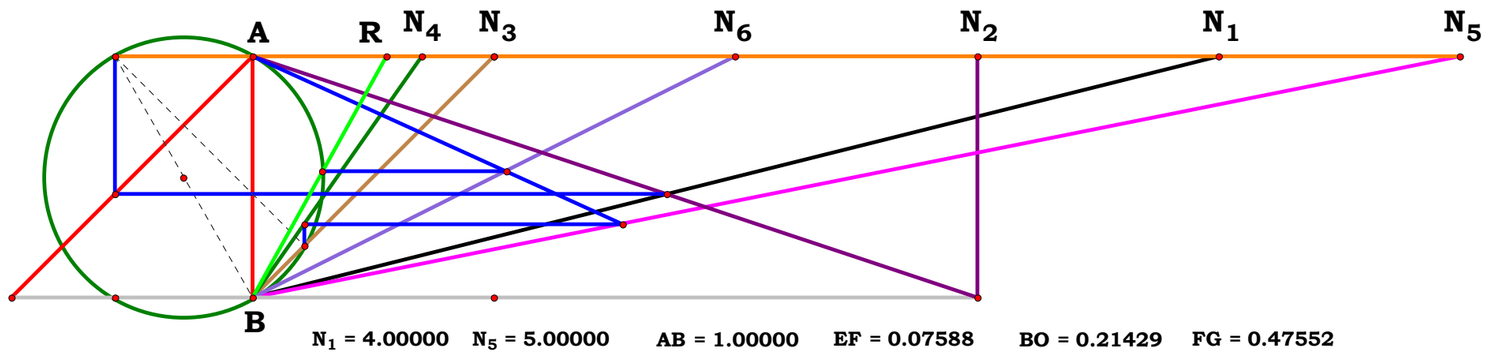
$$KN_3 := \frac{N_3 \cdot CN_3}{BN_3} \qquad BO := \frac{N_3 \cdot (BN_3 - KN_3)}{BN_3}$$

$$JO := \frac{BO}{N_4} \qquad BP := N_5 \cdot JO$$

$$BQ := \frac{BP \cdot AB}{AB - JO} \qquad FG := \frac{N_6}{BQ + N_6}$$

$$EG := FG + EF \qquad GM := \sqrt{EG \cdot (EH - EG)}$$

$$R := \frac{GM - AF}{AB - FG} \qquad R = 0.369478$$



$N_1 = 4.00000$ $N_5 = 5.00000$ $AB = 1.00000$ $EF = 0.07588$ $BO = 0.21429$ $FG = 0.47552$

$N_2 = 3.00000$ $N_6 = 2.00000$ $AC = 0.57143$ $BN_3 = 1.41421$ $JO = 0.30612$ $EG = 0.55140$

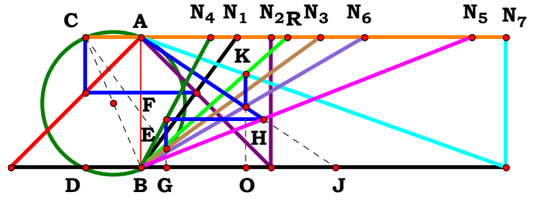
$N_3 = 1.00000$ $R = 0.55225$ $EH = 1.15175$ $CN_3 = 1.57143$ $BP = 1.53061$ $GM = 0.57536$

$N_4 = 0.70000$ $AF = 0.28571$ $KN_3 = 1.11117$ $BQ = 2.20588$ $R - \frac{GM - AF}{AB - FG} = 0.00000$

Definitions.

$$R - \frac{\left[\begin{array}{l} \left(N_3 \cdot N_5 - N_3 \cdot N_6 + N_4 \cdot N_6 + N_3^2 \cdot N_4 \cdot N_6\right) \cdot \left(N_1 + N_2\right) \cdot N_1 - \left(N_5 - N_6\right) \cdot N_1^2 \cdot N_3^2 \ \ldots \\ + \ - \sqrt{N_1^2 \cdot N_6^2 \cdot \left[N_3^2 \cdot \left(N_1 + N_1 \cdot N_4 + N_2 \cdot N_4\right) - \left(N_3 - N_4\right) \cdot \left(N_1 + N_2\right)\right]^2 + N_1^2 \cdot N_3^2 \cdot N_5^2 \cdot \left(N_1 \cdot N_3 - N_2 - N_1\right)^2} \ \ldots \\ \quad + \ -2 \cdot N_3 \cdot N_5 \cdot N_6 \cdot \left(3 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 2 \cdot N_2^2\right) \cdot \left(N_1 \cdot N_3 - N_2 - N_1\right) \cdot \left[N_3^2 \cdot \left(N_1 + N_1 \cdot N_4 + N_2 \cdot N_4\right) - \left(N_3 - N_4\right) \cdot \left(N_1 + N_2\right)\right] \end{array}\right] \cdot \left(N_1 + N_2\right)^2}{2 \cdot N_3 \cdot N_5 \cdot \left(N_1 \cdot N_3 - N_2 - N_1\right) \cdot \left(N_1 + N_2\right)^3} = 0$$

4RST6B3R10



$N_1 = 0.73353$ $N_4 = 0.53249$ $N_7 = 2.79739$

$N_2 = 0.99504$ $N_5 = 2.53768$ $R = 1.11879$

$N_3 = 1.37752$ $N_6 = 1.71544$

Unit. $AB := 1$ **Given.** $N_1 := .73353$ $N_2 := .99504$ $N_3 := 1.37752$ $N_4 := .53249$

$N_5 := 2.53768$ $N_6 := 1.71544$ $N_7 := 2.79739$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5} \quad F := \frac{N_u}{N_6} \quad G := \frac{N_u}{N_7}$$

Descriptions.

$$\frac{D \cdot N_u \cdot \left[C \cdot (A + B) - B \cdot N_u\right]}{N_u^2 \cdot E \cdot (A + B) + N_u \cdot B \cdot D \cdot (E - F + G) + C \cdot [E \cdot (C - D) + D \cdot (F - G)] \cdot (A + B)} = 1.118775$$

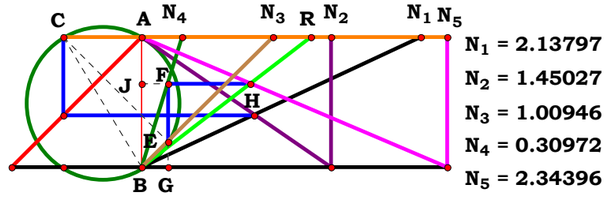
$$Num := \frac{D \cdot N_u \cdot \left[C \cdot (A + B) - B \cdot N_u\right]}{\sqrt{\left[D \cdot N_u \cdot \left[C \cdot (A + B) - B \cdot N_u\right]\right]^2}}$$

$$Den := \frac{N_u^2 \cdot E \cdot (A + B) + N_u \cdot B \cdot D \cdot (E - F + G) + C \cdot [E \cdot (C - D) + D \cdot (F - G)] \cdot (A + B)}{\sqrt{\left[N_u^2 \cdot E \cdot (A + B) + N_u \cdot B \cdot D \cdot (E - F + G) + C \cdot [E \cdot (C - D) + D \cdot (F - G)] \cdot (A + B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot N_u \cdot \sqrt{\left[E \cdot (A + B) \cdot N_u^2 + B \cdot D \cdot (E - F + G) \cdot N_u + C \cdot [E \cdot (C - D) + D \cdot (F - G)] \cdot (A + B)\right]^2} \cdot \left[C \cdot (A + B) - B \cdot N_u\right]}{\sqrt{D^2 \cdot N_u^2 \cdot \left[C \cdot (A + B) - B \cdot N_u\right]^2} \cdot \left[E \cdot (A + B) \cdot N_u^2 + B \cdot D \cdot (E - F + G) \cdot N_u + C \cdot [E \cdot (C - D) + D \cdot (F - G)] \cdot (A + B)\right]} = 0$$



$N_1 = 2.13797$
$N_2 = 1.45027$
$N_3 = 1.00946$
$N_4 = 0.30972$
$N_5 = 2.34396$
$R = 1.29931$

Unit. $AB := 1$ Given. $N_1 := 2.13797$ $N_2 := 1.45027$ $N_3 := 1.00946$

$N_4 := .30972$ $N_5 := 2.34396$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{(A+B)\cdot N_u^{\,3} + B\cdot D\cdot N_u^{\,2} + N_u\cdot C\cdot (C-D)\cdot (A+B)}{D\cdot E\cdot \left[C\cdot (A+B) - B\cdot N_u\right]} = 1.299387$$

$$Num := \frac{(A+B)\cdot N_u^{\,3} + B\cdot D\cdot N_u^{\,2} + N_u\cdot C\cdot (C-D)\cdot (A+B)}{\sqrt{\left[(A+B)\cdot N_u^{\,3} + B\cdot D\cdot N_u^{\,2} + N_u\cdot C\cdot (C-D)\cdot (A+B)\right]^2}}$$

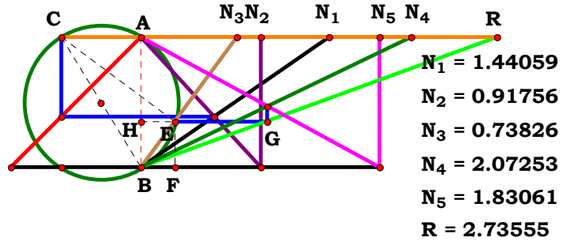
$$Den := \frac{D\cdot E\cdot \left[C\cdot (A+B) - B\cdot N_u\right]}{\sqrt{\left[D\cdot E\cdot \left[C\cdot (A+B) - B\cdot N_u\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[(A+B)\cdot N_u^{\,3} + B\cdot D\cdot N_u^{\,2} + C\cdot (A+B)\cdot (C-D)\cdot N_u\right]\cdot \sqrt{D^2\cdot E^2\cdot \left[C\cdot (A+B) - B\cdot N_u\right]^2}}{D\cdot E\cdot \left[C\cdot (A+B) - B\cdot N_u\right]\cdot \sqrt{\left[(A+B)\cdot N_u^{\,3} + B\cdot D\cdot N_u^{\,2} + C\cdot (A+B)\cdot (C-D)\cdot N_u\right]^2}} = 0$$

4RST6B3R12



$N_1 = 1.44059$
$N_2 = 0.91756$
$N_3 = 0.73826$
$N_4 = 2.07253$
$N_5 = 1.83061$
$R = 2.73555$

Unit. $AB := 1$ **Given.** $N_1 := 1.44059$ $N_2 := .91756$ $N_3 := .73826$ $N_4 := 2.07253$ $N_5 := 1.83061$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A + B)}{C \cdot (D + E) \cdot \left[C \cdot (A + B) - B \cdot N_u\right]} = 2.735571$$

$$Num := \frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + N_u^2\right) \cdot (A + B)\right]^2}}$$

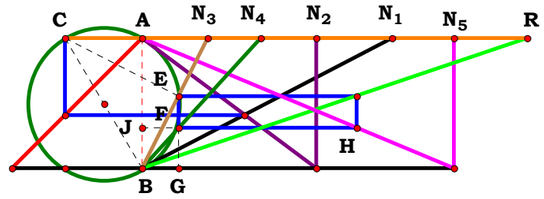
$$Den := \frac{C \cdot (D + E) \cdot \left[C \cdot (A + B) - B \cdot N_u\right]}{\sqrt{\left[C \cdot (D + E) \cdot \left[C \cdot (A + B) - B \cdot N_u\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + N_u^2\right) \cdot (A + B) \cdot \sqrt{C^2 \cdot (D + E)^2 \cdot \left[C \cdot (A + B) - B \cdot N_u\right]^2}}{C \cdot (D + E) \cdot \left[C \cdot (A + B) - B \cdot N_u\right] \cdot \sqrt{N_u^2 \cdot \left(C^2 + N_u^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST6B3R13



$N_1 = 1.91519$
$N_2 = 1.33405$
$N_3 = 0.50580$
$N_4 = 0.91023$
$N_5 = 2.39239$
$R = 2.95122$

Unit. $AB := 1$ Given. $N_1 := 1.91519$ $N_2 := 1.33405$ $N_3 := .50580$

$N_4 := .91023$ $N_5 := 2.39239$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{(A+B)\cdot N_u^{\,3} + B\cdot D\cdot N_u^{\,2} + N_u\cdot C\cdot (C-D)\cdot (A+B)}{C\cdot E\cdot \left[C\cdot (A+B) - B\cdot N_u\right]} = 2.951229$$

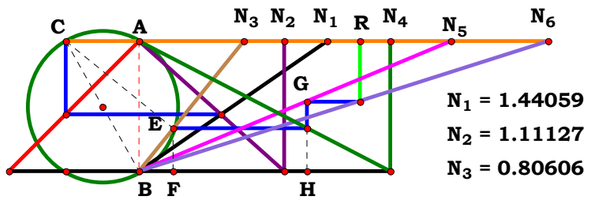
$$Num := \frac{(A+B)\cdot N_u^{\,3} + B\cdot D\cdot N_u^{\,2} + N_u\cdot C\cdot (C-D)\cdot (A+B)}{\sqrt{\left[(A+B)\cdot N_u^{\,3} + B\cdot D\cdot N_u^{\,2} + N_u\cdot C\cdot (C-D)\cdot (A+B)\right]^2}}$$

$$Den := \frac{C\cdot E\cdot \left[C\cdot (A+B) - B\cdot N_u\right]}{\sqrt{\left[C\cdot E\cdot \left[C\cdot (A+B) - B\cdot N_u\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[(A+B)\cdot N_u^{\,3} + B\cdot D\cdot N_u^{\,2} + C\cdot (A+B)\cdot (C-D)\cdot N_u\right]\cdot \sqrt{C^2\cdot E^2\cdot \left[C\cdot (A+B) - B\cdot N_u\right]^2}}{C\cdot E\cdot \left[C\cdot (A+B) - B\cdot N_u\right]\cdot \sqrt{\left[(A+B)\cdot N_u^{\,3} + B\cdot D\cdot N_u^{\,2} + C\cdot (A+B)\cdot (C-D)\cdot N_u\right]^2}} = 0$$

4RST6B3R14



$N_1 = 1.44059$ $N_4 = 1.92724$

$N_2 = 1.11127$ $N_5 = 2.39239$

$N_3 = 0.80606$ $N_6 = 3.13925$

R = 1.69351

Unit. $AB := 1$ Given. $N_1 := 1.44059$ $N_2 := 1.11127$ $N_3 := .80606$

$N_4 := 1.92724$ $N_5 := 2.39239$ $N_6 := 3.13925$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{E \cdot N_u^{\,2} \cdot \left[B \cdot C + N_u \cdot (A + B)\right]}{D \cdot F \cdot \left(C^2 + N_u^{\,2}\right) \cdot (A + B)} = 1.693517$$

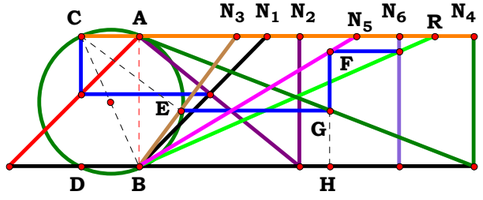
$$Num := \frac{E \cdot N_u^{\,2} \cdot \left[B \cdot C + N_u \cdot (A + B)\right]}{\sqrt{\left[E \cdot N_u^{\,2} \cdot \left[B \cdot C + N_u \cdot (A + B)\right]\right]^2}}$$

$$Den := \frac{D \cdot F \cdot \left(C^2 + N_u^{\,2}\right) \cdot (A + B)}{\sqrt{\left[D \cdot F \cdot \left(C^2 + N_u^{\,2}\right) \cdot (A + B)\right]^2}} \qquad L := \frac{Num}{Den}$$

Num = 1 Den = 1 L = 1

$$L - \frac{E \cdot N_u^{\,2} \cdot \left[N_u \cdot (A + B) + B \cdot C\right] \cdot \sqrt{D^2 \cdot F^2 \cdot \left(C^2 + N_u^{\,2}\right)^2 \cdot (A + B)^2}}{D \cdot F \cdot \left(C^2 + N_u^{\,2}\right) \cdot (A + B) \cdot \sqrt{E^2 \cdot N_u^{\,4} \cdot \left[N_u \cdot (A + B) + B \cdot C\right]^2}} = 0$$

4RST6B3R15



$N_1 = 0.97567$ $N_2 = 1.22750$ $N_3 = 0.74794$

$N_4 = 2.56650$ $N_5 = 1.66595$ $N_6 = 1.99633$ $R = 2.26889$

Unit. $AB := 1$ **Given.** $N_1 := .97567$ $N_2 := 1.22750$ $N_3 := .74794$

$N_4 := 2.56650$ $N_5 := 1.66595$ $N_6 := 1.99633$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

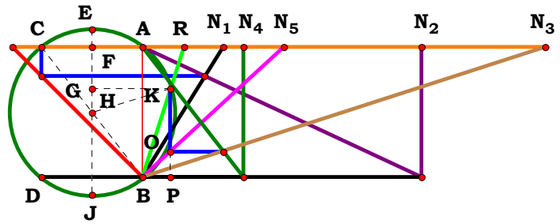
Descriptions.

$$\frac{D\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)}{E\cdot F\cdot\left[B\cdot C+N_u\cdot(A+B)\right]}=2.268889 \qquad Num := \frac{D\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)}{\sqrt{\left[D\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)\right]^2}}$$

$$Den := \frac{E\cdot F\cdot\left[B\cdot C+N_u\cdot(A+B)\right]}{\sqrt{\left[E\cdot F\cdot\left[B\cdot C+N_u\cdot(A+B)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{D\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)\cdot\sqrt{E^2\cdot F^2\cdot\left[N_u\cdot(A+B)+B\cdot C\right]^2}}{E\cdot F\cdot\left[N_u\cdot(A+B)+B\cdot C\right]\cdot\sqrt{D^2\cdot\left(C^2+N_u{}^2\right)^2\cdot(A+B)^2}}=0$$



$N_1 = 0.61730$
$N_2 = 2.13797$
$N_3 = 3.09190$
$N_4 = 0.77463$
$N_5 = 1.08481$
$R = 0.31740$

Unit. $AB := 1$ Given. $N_1 := .61730$ $N_2 := 2.13797$ $N_3 := 3.09190$

$N_4 := .77463$ $N_5 := 1.08481$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{2 \cdot C \cdot N_u \cdot \sqrt{N_u \cdot (A+B)}}{\sqrt{N_u \cdot \left[E^2 \cdot (A+B) \cdot (C+D)^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot E \cdot (C+D) + C \cdot N_u \cdot (A+B)\right]\right]} + \sqrt{N_u \cdot (A+B)} \cdot E \cdot (C+D)} = 0.317401$$

$$Num := \frac{2 \cdot C \cdot N_u \cdot \sqrt{N_u \cdot (A+B)}}{\sqrt{\left[2 \cdot C \cdot N_u \cdot \sqrt{N_u \cdot (A+B)}\right]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot \left[E^2 \cdot (A+B) \cdot (C+D)^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot E \cdot (C+D) + C \cdot N_u \cdot (A+B)\right]\right]} + \sqrt{N_u \cdot (A+B)} \cdot E \cdot (C+D)}{\sqrt{\left[\sqrt{N_u \cdot \left[E^2 \cdot (A+B) \cdot (C+D)^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot E \cdot (C+D) + C \cdot N_u \cdot (A+B)\right]\right]} + \sqrt{N_u \cdot (A+B)} \cdot E \cdot (C+D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot \sqrt{\left[\sqrt{N_u \cdot \left[E^2 \cdot (A+B) \cdot (C+D)^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot E \cdot (C+D) + C \cdot N_u \cdot (A+B)\right]\right]} + E \cdot \sqrt{N_u \cdot (A+B)} \cdot (C+D)\right]^2}}{\left[\sqrt{N_u \cdot \left[E^2 \cdot (A+B) \cdot (C+D)^2 - 4 \cdot C \cdot N_u \cdot \left[A \cdot E \cdot (C+D) + C \cdot N_u \cdot (A+B)\right]\right]} + E \cdot \sqrt{N_u \cdot (A+B)} \cdot (C+D)\right] \cdot \sqrt{C^2 \cdot {N_u}^3 \cdot (A+B)}} = 0$$

4RST6AB4R1

Unit.

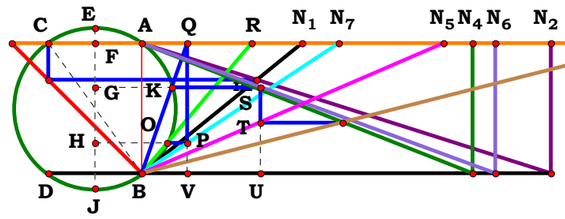
$AB := 1$

Given.

$N_1 := 1.22750$ $N_4 := 2.53745$

$N_2 := 3.13560$ $N_5 := 2.31490$

$N_3 := 3.93456$ $N_7 := 1.51098$



$N_1 = 1.22750$ $N_5 = 2.31490$

$N_2 = 3.13560$ $N_6 = 2.71202$

$N_3 = 3.93456$ $N_7 = 1.51098$

$N_4 = 2.53745$ $R = 0.83973$

Descriptions.

$AC := \dfrac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \dfrac{AC}{2}$ $EF := \dfrac{EJ - AB}{2}$

$TU := \dfrac{N_4}{N_3 + N_4}$

$BU := N_5 \cdot TU$

$SU := \dfrac{N_6 - BU}{N_6}$

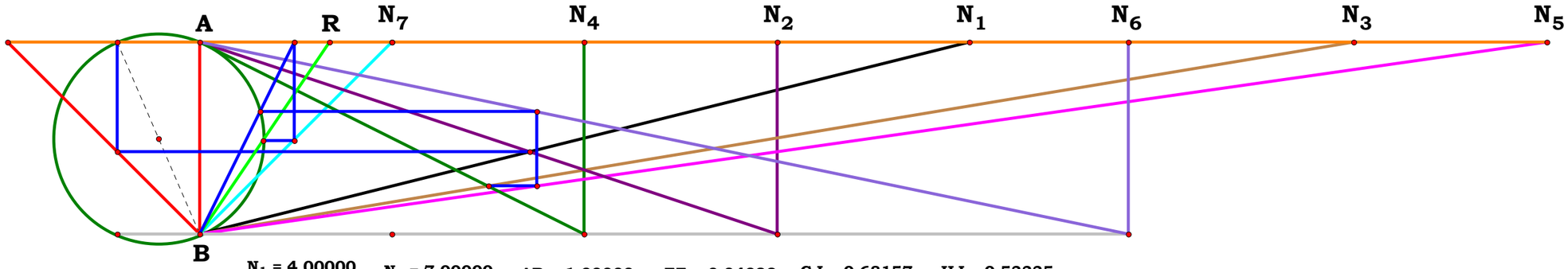
$GJ := SU + EF$

$GK := \sqrt{GJ \cdot (EJ - GJ)}$ $AQ := \dfrac{GK - AF}{SU}$

$PV := \dfrac{AQ}{N_7}$ $HJ := PV + EF$

$HO := \sqrt{HJ \cdot (EJ - HJ)}$ $R := \dfrac{HO - AF}{PV}$

$R = 0.83973$



$N_1 = 4.00000$ $N_5 = 7.00000$ $AB = 1.00000$ $EF = 0.04398$ $GJ = 0.68157$ $HJ = 0.53335$

$N_2 = 3.00000$ $N_6 = 4.82872$ $AC = 0.42857$ $TU = 0.25000$ $GK = 0.52630$ $HO = 0.54388$

$N_3 = 6.00000$ $N_7 = 1.00000$ $EJ = 1.08797$ $BU = 1.75000$ $AQ = 0.48936$ $R - \dfrac{HO - AF}{PV} = 0.00000$

$N_4 = 2.00000$ $R = 0.67351$ $AF = 0.21429$ $SU = 0.63759$ $PV = 0.48936$

4RST6AB4R2

Unit.

$AB := 1$

Given.

$N_1 := 1$

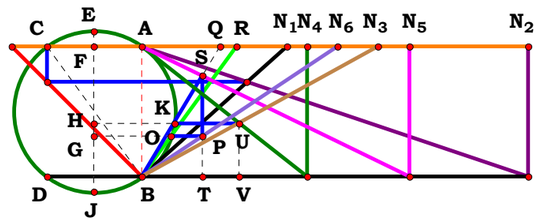
$N_2 := 4$

$N_3 := 5$

$N_4 := 3$

$N_5 := 6$

$N_6 := 2$



$N_1 = 1.11127$ $N_5 = 2.05339$

$N_2 = 2.96126$ $N_6 = 1.50130$

$N_3 = 1.81338$ $R = 0.72418$

$N_4 = 1.26861$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

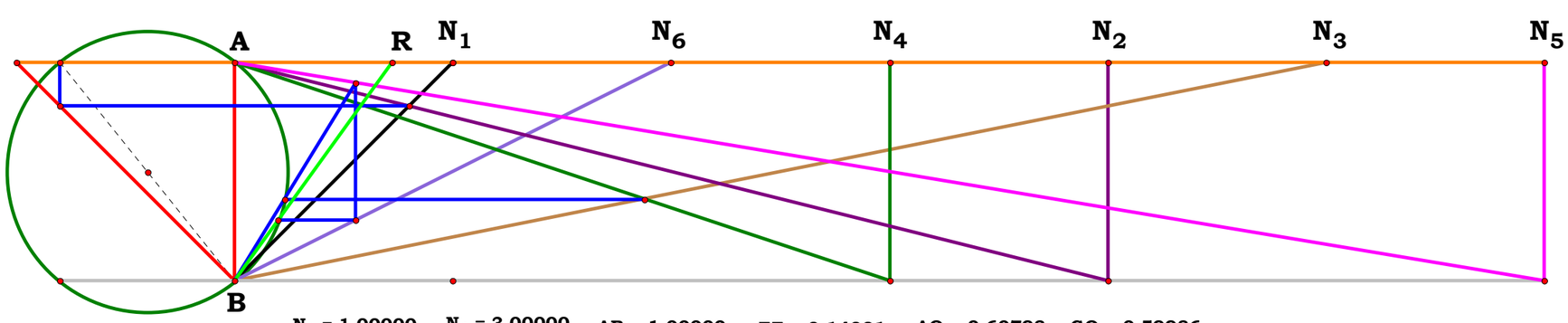
$UV := \frac{N_4}{N_3 + N_4}$ $HJ := UV + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $AQ := \frac{HK - AF}{UV}$

$BT := \frac{AQ \cdot N_5}{AQ + N_5}$ $PT := \frac{BT}{N_6}$

$GJ := PT + EF$ $GO := \sqrt{GJ \cdot (EJ - GJ)}$

$R := \frac{GO - AF}{PT}$ $R = 0.724079$

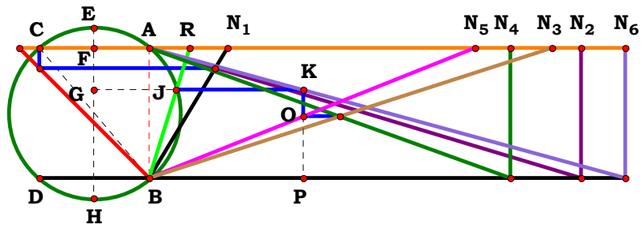


$N_1 = 1.00000$ $N_4 = 3.00000$ $AB = 1.00000$ $EF = 0.14031$ $AQ = 0.60798$ $GO = 0.59986$

$N_2 = 4.00000$ $N_5 = 6.00000$ $AC = 0.80000$ $UV = 0.37500$ $BT = 0.55204$

$N_3 = 5.00000$ $N_6 = 2.00000$ $EJ = 1.28062$ $HJ = 0.51531$ $PT = 0.27602$ $R - \frac{GO - AF}{PT} = 0.00000$

$R = 0.72408$ $AF = 0.40000$ $HK = 0.62799$ $GJ = 0.41633$



$N_1 = 0.59793$
$N_2 = 3.30995$
$N_3 = 3.09190$
$N_4 = 2.76991$
$N_5 = 2.49893$
$N_6 = 3.65154$
$R = 0.30667$

Unit. $AB := 1$ Given. $N_1 := .59793$ $N_2 := 3.30995$ $N_3 := 3.09190$

$N_4 := 2.76991$ $N_5 := 2.49893$ $N_6 := 3.65154$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{\sqrt{A^2 \cdot E^2 \cdot (C+D)^2 + 4 \cdot C \cdot F \cdot [D \cdot E + C \cdot (E-F)] \cdot (A+B)^2} - A \cdot E \cdot (C+D)}{2 \cdot (A+B) \cdot [C \cdot (E-F) + D \cdot E]} = 0.306668$$

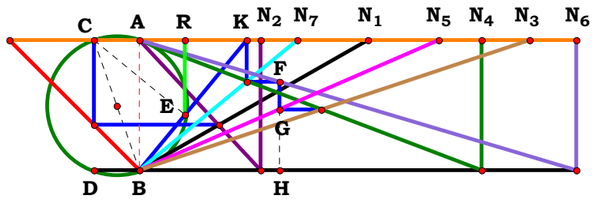
$$Num := \frac{\sqrt{A^2 \cdot E^2 \cdot (C+D)^2 + 4 \cdot C \cdot F \cdot [D \cdot E + C \cdot (E-F)] \cdot (A+B)^2} - A \cdot E \cdot (C+D)}{\sqrt{\left[\sqrt{A^2 \cdot E^2 \cdot (C+D)^2 + 4 \cdot C \cdot F \cdot [D \cdot E + C \cdot (E-F)] \cdot (A+B)^2} - A \cdot E \cdot (C+D)\right]^2}}$$

$$Den := \frac{2 \cdot (A+B) \cdot [C \cdot (E-F) + D \cdot E]}{\sqrt{[2 \cdot (A+B) \cdot [C \cdot (E-F) + D \cdot E]]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{A^2 \cdot E^2 \cdot (C+D)^2 + 4 \cdot C \cdot F \cdot [D \cdot E + C \cdot (E-F)] \cdot (A+B)^2} - A \cdot E \cdot (C+D)\right] \cdot \sqrt{[D \cdot E + C \cdot (E-F)]^2 \cdot (2 \cdot A + 2 \cdot B)^2}}{[D \cdot E + C \cdot (E-F)] \cdot (2 \cdot A + 2 \cdot B) \cdot \sqrt{\left[\sqrt{A^2 \cdot E^2 \cdot (C+D)^2 + 4 \cdot C \cdot F \cdot [D \cdot E + C \cdot (E-F)] \cdot (A+B)^2} - A \cdot E \cdot (C+D)\right]^2}} = 0$$

4RST6B4R4



$N_1 = 1.75053$ $N_3 = 2.99504$ $N_5 = 2.29553$ $N_7 = 1.21072$

$N_2 = 0.92724$ $N_4 = 2.62462$ $N_6 = 3.35128$ $R = 0.35080$

Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := .92724$ $N_3 := 2.99504$ $N_4 := 2.62462$

$N_5 := 2.29553$ $N_6 := 3.35128$ $N_7 := 1.21072$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.

$$\frac{N_u\cdot(C\cdot E - C\cdot F + D\cdot E)\cdot\left[G\cdot E\cdot(C+D)\cdot(A+B) - A\cdot N_u\cdot[C\cdot(E-F)+D\cdot E]\right]}{(A+B)\cdot\left[G^2\cdot E^2\cdot(C+D)^2 + {N_u}^2\cdot(C\cdot E - C\cdot F + D\cdot E)^2\right]} = 0.350796$$

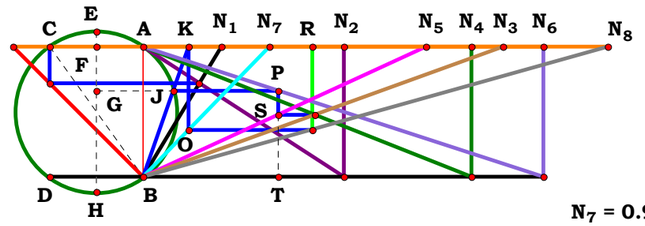
$$\text{Num} := \frac{N_u\cdot(C\cdot E - C\cdot F + D\cdot E)\cdot\left[G\cdot E\cdot(C+D)\cdot(A+B) - A\cdot N_u\cdot[C\cdot(E-F)+D\cdot E]\right]}{\sqrt{\left[N_u\cdot(C\cdot E - C\cdot F + D\cdot E)\cdot\left[G\cdot E\cdot(C+D)\cdot(A+B) - A\cdot N_u\cdot[C\cdot(E-F)+D\cdot E]\right]\right]^2}}$$

$$\text{Den} := \frac{(A+B)\cdot\left[G^2\cdot E^2\cdot(C+D)^2 + {N_u}^2\cdot(C\cdot E - C\cdot F + D\cdot E)^2\right]}{\sqrt{\left[(A+B)\cdot\left[G^2\cdot E^2\cdot(C+D)^2 + {N_u}^2\cdot(C\cdot E - C\cdot F + D\cdot E)^2\right]\right]^2}} \qquad L := \frac{\text{Num}}{\text{Den}}$$

$\text{Num} = 1$ $\text{Den} = 1$ $L = 1$

$$L - \frac{N_u\cdot\left[G\cdot E\cdot(C+D)\cdot(A+B) - A\cdot N_u\cdot[C\cdot(E-F)+D\cdot E]\right]\cdot\sqrt{\left[{N_u}^2\cdot(C\cdot E - C\cdot F + D\cdot E)^2 + E^2\cdot G^2\cdot(C+D)^2\right]^2\cdot(A+B)^2}\cdot(C\cdot E - C\cdot F + D\cdot E)}{\left[{N_u}^2\cdot(C\cdot E - C\cdot F + D\cdot E)^2 + E^2\cdot G^2\cdot(C+D)^2\right]\cdot(A+B)\cdot\sqrt{\left[N_u\cdot(C\cdot E - C\cdot F + D\cdot E)\cdot\left[G\cdot E\cdot(C+D)\cdot(A+B) - A\cdot N_u\cdot[C\cdot(E-F)+D\cdot E]\right]\right]^2}} = 0$$

4RST6B4R5



$N_7 = 0.96858$

$N_1 = 0.59793$ $N_3 = 2.76258$ $N_5 = 2.16962$ $N_8 = 3.56437$

$N_2 = 1.53745$ $N_4 = 2.51808$ $N_6 = 3.07039$ $R = 1.29958$

Descriptions.

Unit. $AB := 1$ **Given.** $N_1 := .59793$ $N_2 := 1.53745$ $N_3 := 2.76258$ $N_4 := 2.51808$

$N_5 := 2.16962$ $N_6 := 3.07039$ $N_7 := .96858$ $N_8 := 3.56437$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

$$\frac{G\cdot\left[\sqrt{A^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot(C\cdot E-C\cdot F+D\cdot E)}-A\cdot E\cdot(C+D)\right]}{2\cdot H\cdot(A+B)\cdot[C\cdot(E-F)+D\cdot E]} = 1.299587$$

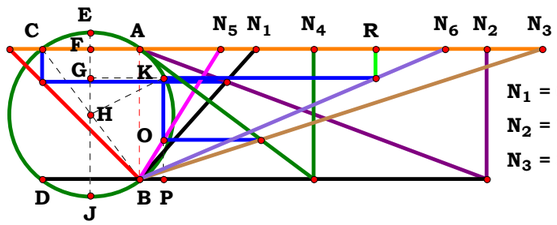
$$Num := \frac{G\cdot\left[\sqrt{A^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot(C\cdot E-C\cdot F+D\cdot E)}-A\cdot E\cdot(C+D)\right]}{\sqrt{\left[G\cdot\left[\sqrt{A^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot(C\cdot E-C\cdot F+D\cdot E)}-A\cdot E\cdot(C+D)\right]\right]^2}}$$

$$Den := \frac{2\cdot H\cdot(A+B)\cdot[C\cdot(E-F)+D\cdot E]}{\sqrt{[2\cdot H\cdot(A+B)\cdot[C\cdot(E-F)+D\cdot E]]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{G\cdot\left[\sqrt{A^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot(C\cdot E-C\cdot F+D\cdot E)}-A\cdot E\cdot(C+D)\right]\cdot\sqrt{H^2\cdot[D\cdot E+C\cdot(E-F)]^2\cdot(A+B)^2}}{H\cdot[D\cdot E+C\cdot(E-F)]\cdot(A+B)\cdot\sqrt{G^2\cdot\left[\sqrt{A^2\cdot E^2\cdot(C+D)^2+4\cdot C\cdot F\cdot(A+B)^2\cdot(C\cdot E-C\cdot F+D\cdot E)}-A\cdot E\cdot(C+D)\right]^2}} = 0$$

4RST6B4R6



$N_1 = 0.88850$
$N_2 = 2.66100$
$N_3 = 3.09190$
$N_4 = 1.33641$
$N_5 = 0.61989$
$N_6 = 2.34396$
$R = 1.81285$

Unit. $AB := 1$ Given. $N_1 := .88850$ $N_2 := 2.66100$ $N_3 := 3.09190$ $N_4 := 1.33641$ $N_5 := .61989$ $N_6 := 2.34396$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{N_u\cdot\left[\sqrt{N_u\cdot\left[E\cdot(C+D)\cdot\left[E\cdot(C+D)\cdot(A+B)-4\cdot A\cdot C\cdot N_u\right]-4\cdot C^2\cdot {N_u}^2\cdot(A+B)\right]}+\sqrt{\left[N_u\cdot(A+B)\right]}\cdot E\cdot(C+D)\right]}{2\cdot\sqrt{\left[N_u\cdot(A+B)\right]}\cdot F\cdot(C+D)\cdot E} = 1.812854$$

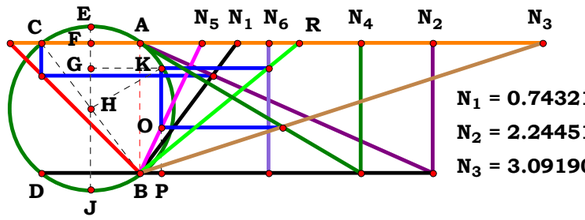
$$Num := \frac{N_u\cdot\left[\sqrt{N_u\cdot\left[E\cdot(C+D)\cdot\left[E\cdot(C+D)\cdot(A+B)-4\cdot A\cdot C\cdot N_u\right]-4\cdot C^2\cdot {N_u}^2\cdot(A+B)\right]}+\sqrt{\left[N_u\cdot(A+B)\right]}\cdot E\cdot(C+D)\right]}{\sqrt{\left[N_u\cdot\left[\sqrt{N_u\cdot\left[E\cdot(C+D)\cdot\left[E\cdot(C+D)\cdot(A+B)-4\cdot A\cdot C\cdot N_u\right]-4\cdot C^2\cdot {N_u}^2\cdot(A+B)\right]}+\sqrt{\left[N_u\cdot(A+B)\right]}\cdot E\cdot(C+D)\right]\right]^2}}$$

$$Den := \frac{2\cdot\sqrt{\left[N_u\cdot(A+B)\right]}\cdot F\cdot(C+D)\cdot E}{\sqrt{\left[2\cdot\sqrt{\left[N_u\cdot(A+B)\right]}\cdot F\cdot(C+D)\cdot E\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u\cdot\left[\sqrt{N_u\cdot\left[E\cdot(C+D)\cdot\left[E\cdot(A+B)\cdot(C+D)-4\cdot A\cdot C\cdot N_u\right]-4\cdot C^2\cdot {N_u}^2\cdot(A+B)\right]}+E\cdot\sqrt{N_u\cdot(A+B)}\cdot(C+D)\right]\cdot\sqrt{E^2\cdot F^2\cdot N_u\cdot(A+B)\cdot(C+D)^2}}{E\cdot F\cdot\sqrt{{N_u}^2\cdot\left[\sqrt{N_u\cdot\left[E\cdot(C+D)\cdot\left[E\cdot(A+B)\cdot(C+D)-4\cdot A\cdot C\cdot N_u\right]-4\cdot C^2\cdot {N_u}^2\cdot(A+B)\right]}+E\cdot\sqrt{N_u\cdot(A+B)}\cdot(C+D)\right]^2}\cdot\sqrt{N_u\cdot(A+B)}\cdot(C+D)} = 0$$



$N_1 = 0.74321$ $N_2 = 2.24451$ $N_3 = 3.09190$ $N_4 = 1.69478$ $N_5 = 0.47460$ $N_6 = 0.98795$ $R = 1.22109$

Unit. $AB := 1$ Given. $N_1 := .74321$ $N_2 := 2.24451$ $N_3 := 3.09190$ $N_4 := 1.69478$ $N_5 := .47460$ $N_6 := .98795$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5} \quad F := \frac{N_u}{N_6}$$

Descriptions.

$$\frac{2\cdot N_u\cdot\sqrt{N_u\cdot(A+B)}\cdot(C+D)\cdot E}{F\cdot\left[\sqrt{N_u\cdot\left[E\cdot(C+D)\cdot\left[E\cdot(A+B)\cdot(C+D)-4\cdot A\cdot C\cdot N_u\right]-4\cdot C^2\cdot {N_u}^2\cdot(A+B)\right]}+\sqrt{\left[N_u\cdot(A+B)\right]\cdot E\cdot(C+D)}\right]} = 1.221089$$

$$Num := \frac{2\cdot N_u\cdot\sqrt{N_u\cdot(A+B)}\cdot(C+D)\cdot E}{\sqrt{\left[2\cdot N_u\cdot\sqrt{N_u\cdot(A+B)}\cdot(C+D)\cdot E\right]^2}}$$

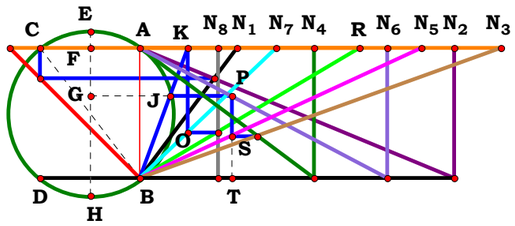
$$Den := \frac{F\cdot\left[\sqrt{N_u\cdot\left[E\cdot(C+D)\cdot\left[E\cdot(A+B)\cdot(C+D)-4\cdot A\cdot C\cdot N_u\right]-4\cdot C^2\cdot {N_u}^2\cdot(A+B)\right]}+\sqrt{\left[N_u\cdot(A+B)\right]\cdot E\cdot(C+D)}\right]}{\sqrt{\left[F\cdot\left[\sqrt{N_u\cdot\left[E\cdot(C+D)\cdot\left[E\cdot(A+B)\cdot(C+D)-4\cdot A\cdot C\cdot N_u\right]-4\cdot C^2\cdot {N_u}^2\cdot(A+B)\right]}+\sqrt{\left[N_u\cdot(A+B)\right]\cdot E\cdot(C+D)}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{E\cdot N_u\cdot\sqrt{F^2\cdot\left[\sqrt{N_u\cdot\left[E\cdot(C+D)\cdot\left[E\cdot(A+B)\cdot(C+D)-4\cdot A\cdot C\cdot N_u\right]-4\cdot C^2\cdot {N_u}^2\cdot(A+B)\right]}+E\cdot\sqrt{N_u\cdot(A+B)}\cdot(C+D)\right]^2}\cdot\sqrt{N_u\cdot(A+B)}\cdot(C+D)}{F\cdot\left[\sqrt{N_u\cdot\left[E\cdot(C+D)\cdot\left[E\cdot(A+B)\cdot(C+D)-4\cdot A\cdot C\cdot N_u\right]-4\cdot C^2\cdot {N_u}^2\cdot(A+B)\right]}+E\cdot\sqrt{N_u\cdot(A+B)}\cdot(C+D)\right]\cdot\sqrt{E^2\cdot {N_u}^3\cdot(A+B)\cdot(C+D)^2}} = 0$$

4RST6B4R8



$N_1 = 0.74321$ $N_3 = 2.77227$ $N_5 = 2.15993$
$N_2 = 2.41649$ $N_4 = 1.33641$ $N_6 = 1.89841$

$N_7 = 1.04606$
$N_8 = 0.59870$
$R = 1.68944$

Unit. $AB := 1$ Given. $N_1 := .74321$ $N_2 := 2.41649$ $N_3 := 2.77227$ $N_4 := 1.33641$

$N_5 := 2.15993$ $N_6 := 1.89841$ $N_7 := 1.04606$ $N_8 := .59870$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

Descriptions.

$$\frac{2 \cdot N_u^2 \cdot (A+B) \cdot [C \cdot (E-F) + D \cdot E]}{G \cdot H \cdot \left[\sqrt{4 \cdot C \cdot F \cdot (A+B)^2 \cdot [C \cdot (E-F) + D \cdot E] + A^2 \cdot E^2 \cdot (C+D)^2} - A \cdot E \cdot (C+D)\right]} = 1.689429$$

$$Num := \frac{N_u^2 \cdot (A+B) \cdot [C \cdot (E-F) + D \cdot E]}{\sqrt{\left[N_u^2 \cdot (A+B) \cdot [C \cdot (E-F) + D \cdot E]\right]^2}}$$

$$Den := \frac{G \cdot H \cdot \left[\sqrt{4 \cdot C \cdot F \cdot (A+B)^2 \cdot [C \cdot (E-F) + D \cdot E] + A^2 \cdot E^2 \cdot (C+D)^2} - A \cdot E \cdot (C+D)\right]}{\sqrt{\left[G \cdot H \cdot \left[\sqrt{4 \cdot C \cdot F \cdot (A+B)^2 \cdot [C \cdot (E-F) + D \cdot E] + A^2 \cdot E^2 \cdot (C+D)^2} - A \cdot E \cdot (C+D)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot [D \cdot E + C \cdot (E-F)] \cdot (A+B) \cdot \sqrt{G^2 \cdot H^2 \cdot \left[\sqrt{A^2 \cdot E^2 \cdot (C+D)^2 + 4 \cdot C \cdot F \cdot [D \cdot E + C \cdot (E-F)] \cdot (A+B)^2} - A \cdot E \cdot (C+D)\right]^2}}{G \cdot H \cdot \left[\sqrt{A^2 \cdot E^2 \cdot (C+D)^2 + 4 \cdot C \cdot F \cdot [D \cdot E + C \cdot (E-F)] \cdot (A+B)^2} - A \cdot E \cdot (C+D)\right] \cdot \sqrt{N_u^4 \cdot [D \cdot E + C \cdot (E-F)]^2 \cdot (A+B)^2}} = 0$$

4RST6AB4R9

Unit.

$AB := 1$

Given.

$N_1 := 1.35342$

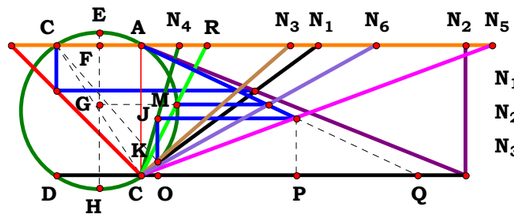
$N_2 := 2.48665$

$N_3 := 1.14506$

$N_4 := .29034$

$N_5 := 2.69265$

$N_6 := 1.80156$



$N_1 = 1.35342$
$N_2 = 2.48665$
$N_3 = 1.14506$
$N_4 = 0.29034$
$N_5 = 2.69265$
$N_6 = 1.80156$
$R = 0.49974$

Descriptions.

$$AC := \frac{N_2}{N_1 + N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EH - AB}{2}$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad CN_3 := N_3 + AC$$

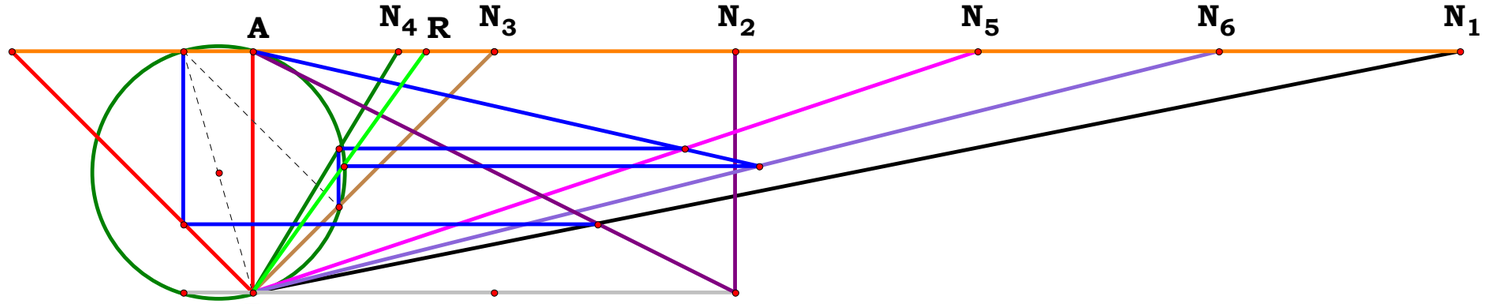
$$KN_3 := \frac{N_3 \cdot CN_3}{BN_3} \qquad BO := \frac{N_3 \cdot (BN_3 - KN_3)}{BN_3}$$

$$JO := \frac{BO}{N_4} \qquad BP := N_5 \cdot JO$$

$$BQ := \frac{BP \cdot AB}{AB - JO} \qquad FG := \frac{N_6}{BQ + N_6}$$

$$EG := FG + EF \qquad GM := \sqrt{EG \cdot (EH - EG)}$$

$$R := \frac{GM - AF}{AB - FG} \qquad R = 0.499729$$



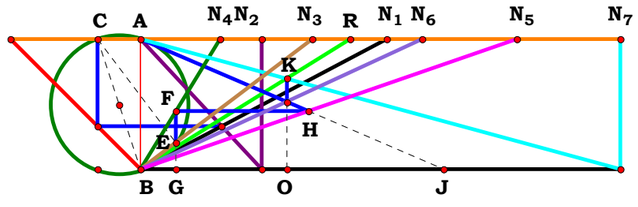
B

$N_1 = 5.00000$
$N_2 = 2.00000$
$N_3 = 1.00000$
$N_4 = 0.60000$
$N_5 = 3.00000$
$N_6 = 4.00000$
$R = 0.71800$
$AB = 1.00000$
$AC = 0.28571$
$EH = 1.04002$
$AF = 0.14286$
$EF = 0.02001$
$BN_3 = 1.41421$
$CN_3 = 1.28571$
$KN_3 = 0.90914$
$BO = 0.35714$
$JO = 0.59524$
$BP = 1.78571$
$BQ = 4.41176$
$FG = 0.47552$
$EG = 0.49553$
$GM = 0.51943$
$R - \frac{GM - AF}{AB - FG} = 0.00000$

Definitions.

$$R - \frac{\left(N_1 + N_2\right)^2 \cdot \sqrt{\begin{array}{l} N_2^2 \cdot N_6^2 \cdot \left[N_3^2 \cdot \left[N_2 + N_4 \cdot \left(N_1 + N_2\right)\right] - \left(N_3 - N_4\right) \cdot \left(N_1 + N_2\right)\right]^2 + N_2^2 \cdot N_3^2 \cdot N_5^2 \cdot \left(N_1 + N_2 - N_2 \cdot N_3\right)^2 \ \ldots \\ + \ 2 \cdot N_3 \cdot N_5 \cdot N_6 \cdot \left(2 \cdot N_1^2 + 4 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2\right) \cdot \left(N_1 + N_2 - N_2 \cdot N_3\right) \cdot \left[N_3^2 \cdot \left[N_2 + N_4 \cdot \left(N_1 + N_2\right)\right] - \left(N_3 - N_4\right) \cdot \left(N_1 + N_2\right)\right] \end{array}} \quad \ldots}{\begin{array}{l} + \ -\sqrt{\left(N_1 + N_2\right)^4} \cdot N_2 \cdot \left[\left[N_3 \cdot \left(N_5 - N_6\right) + N_4 \cdot N_6 \cdot \left(N_3^2 + 1\right)\right] \cdot \left(N_1 + N_2\right) - \left(N_5 - N_6\right) \cdot N_2 \cdot N_3^2\right] \\ 2 \cdot N_3 \cdot N_5 \cdot \left(N_1 + N_2 - N_2 \cdot N_3\right) \cdot \left(N_1 + N_2\right)^3 \end{array}} = 0$$

4RST6B4R10



$N_1 = 1.88613$ $N_3 = 1.31940$ $N_5 = 2.88636$ $N_7 = 3.68060$

$N_2 = 0.92724$ $N_4 = 0.60998$ $N_6 = 2.15993$ $R = 1.60871$

Unit. $AB := 1$ **Given.** $N_1 := 1.88613$ $N_2 := .92724$ $N_3 := 1.31940$ $N_4 := .60998$

$N_5 := 2.88636$ $N_6 := 2.15993$ $N_7 := 3.68060$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.

$$\frac{D \cdot N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u)}{\left[E \cdot \left(C^2 - D \cdot C + N_u{}^2\right) + C \cdot D \cdot F - C \cdot D \cdot G\right] \cdot (A + B) + A \cdot D \cdot N_u \cdot (E - F + G)} = 1.608696$$

$$Num := \frac{D \cdot N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u)}{\sqrt{\left[D \cdot N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u)\right]^2}}$$

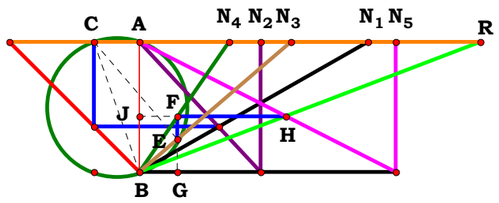
$$Den := \frac{\left[E \cdot \left(C^2 - D \cdot C + N_u{}^2\right) + C \cdot D \cdot F - C \cdot D \cdot G\right] \cdot (A + B) + A \cdot D \cdot N_u \cdot (E - F + G)}{\sqrt{\left[\left[E \cdot \left(C^2 - D \cdot C + N_u{}^2\right) + C \cdot D \cdot F - C \cdot D \cdot G\right] \cdot (A + B) + A \cdot D \cdot N_u \cdot (E - F + G)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot N_u \cdot \sqrt{\left[(A + B) \cdot \left[E \cdot \left(C^2 - D \cdot C + N_u{}^2\right) + C \cdot D \cdot F - C \cdot D \cdot G\right] + A \cdot D \cdot N_u \cdot (E - F + G)\right]^2} \cdot (A \cdot C + B \cdot C - A \cdot N_u)}{\left[(A + B) \cdot \left[E \cdot \left(C^2 - D \cdot C + N_u{}^2\right) + C \cdot D \cdot F - C \cdot D \cdot G\right] + A \cdot D \cdot N_u \cdot (E - F + G)\right] \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot (A \cdot C + B \cdot C - A \cdot N_u)^2}} = 0$$

4RST6B4R11



$N_1 = 1.75053$
$N_2 = 0.92724$
$N_3 = 1.16443$
$N_4 = 0.68746$
$N_5 = 1.96621$
$R = 2.61627$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := .92724$ $N_3 := 1.16443$

$N_4 := .68746$ $N_5 := 1.96621$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left[C^2 \cdot (A+B) + {N_u}^2 \cdot (A+B) - C \cdot D \cdot (A+B) + A \cdot D \cdot N_u\right]}{D \cdot E \cdot \left(A \cdot C + B \cdot C - A \cdot N_u\right)} = 2.616258$$

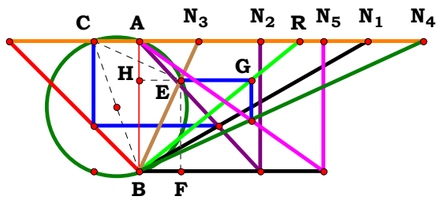
$$Num := \frac{N_u \cdot \left[C^2 \cdot (A+B) + {N_u}^2 \cdot (A+B) - C \cdot D \cdot (A+B) + A \cdot D \cdot N_u\right]}{\sqrt{\left[N_u \cdot \left[C^2 \cdot (A+B) + {N_u}^2 \cdot (A+B) - C \cdot D \cdot (A+B) + A \cdot D \cdot N_u\right]\right]^2}}$$

$$Den := \frac{D \cdot E \cdot \left(A \cdot C + B \cdot C - A \cdot N_u\right)}{\sqrt{\left[D \cdot E \cdot \left(A \cdot C + B \cdot C - A \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{D^2 \cdot E^2 \cdot \left(A \cdot C + B \cdot C - A \cdot N_u\right)^2} \cdot \left[(A+B) \cdot C^2 - D \cdot (A+B) \cdot C + (A+B) \cdot {N_u}^2 + A \cdot D \cdot N_u\right]}{D \cdot E \cdot \sqrt{{N_u}^2 \cdot \left[(A+B) \cdot C^2 - D \cdot (A+B) \cdot C + (A+B) \cdot {N_u}^2 + A \cdot D \cdot N_u\right]^2} \cdot \left(A \cdot C + B \cdot C - A \cdot N_u\right)} = 0$$

4RST6B4R12



$N_1 = 1.75053$
$N_2 = 0.92724$
$N_3 = 0.45737$
$N_4 = 2.17907$
$N_5 = 1.41412$
$R = 1.23212$

Unit. $AB := 1$ Given. $N_1 := 1.75053$ $N_2 := .92724$ $N_3 := .45737$

$N_4 := 2.17907$ $N_5 := 1.41412$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{C \cdot (D + E) \cdot \left[C \cdot (A + B) - A \cdot N_u\right]} = 1.232118$$

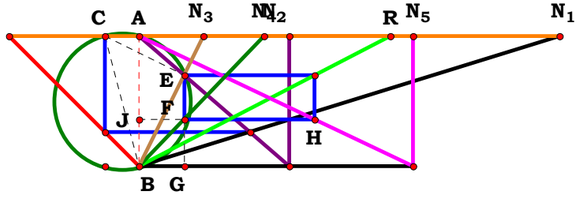
$$Num := \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{C \cdot (D + E) \cdot \left[C \cdot (A + B) - A \cdot N_u\right]}{\sqrt{\left[C \cdot (D + E) \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left(C^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{C^2 \cdot (D + E)^2 \cdot \left[C \cdot (A + B) - A \cdot N_u\right]^2}}{C \cdot (D + E) \cdot \left[C \cdot (A + B) - A \cdot N_u\right] \cdot \sqrt{N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST6B4R13



$N_1 = 3.22277$
$N_2 = 1.15002$
$N_3 = 0.49611$
$N_4 = 0.95866$
$N_5 = 2.10182$
$R = 1.92444$

Unit. $AB := 1$ Given. $N_1 := 3.22277$ $N_2 := 1.15002$ $N_3 := .49611$

$N_4 := .958666$ $N_5 := 2.10182$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

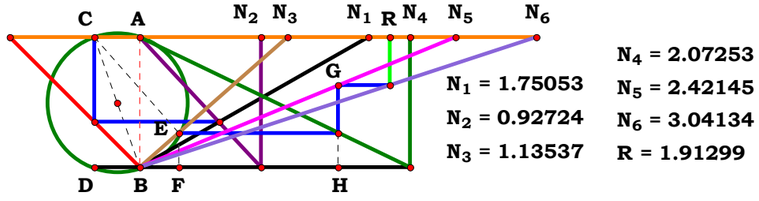
$$\frac{N_u \cdot \left[\left(C^2 + {N_u}^2\right) \cdot (A + B) - D \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]}{C \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right]} = 1.924444$$

$$Num := \frac{N_u \cdot \left[\left(C^2 + {N_u}^2\right) \cdot (A + B) - D \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]}{\sqrt{\left[N_u \cdot \left[\left(C^2 + {N_u}^2\right) \cdot (A + B) - D \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]\right]^2}}$$

$$Den := \frac{C \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right]}{\sqrt{\left[C \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[\left(C^2 + {N_u}^2\right) \cdot (A + B) - D \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right] \cdot \sqrt{C^2 \cdot E^2 \cdot \left[C \cdot (A + B) - A \cdot N_u\right]^2}}{C \cdot E \cdot \left[C \cdot (A + B) - A \cdot N_u\right] \cdot \sqrt{\left[N_u \cdot \left[\left(C^2 + {N_u}^2\right) \cdot (A + B) - D \cdot \left[C \cdot (A + B) - A \cdot N_u\right]\right]\right]^2}} = 0$$



$N_1 = 1.75053$
$N_2 = 0.92724$
$N_3 = 1.13537$
$N_4 = 2.07253$
$N_5 = 2.42145$
$N_6 = 3.04134$
$R = 1.91299$

Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := .92724$ $N_3 := 1.13537$

$N_4 := 2.07253$ $N_5 := 2.42145$ $N_6 := 3.04134$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{E \cdot N_u^{\,2} \cdot \left[A \cdot C + N_u \cdot (A + B)\right]}{D \cdot F \cdot \left(C^2 + N_u^{\,2}\right) \cdot (A + B)} = 1.912992$$

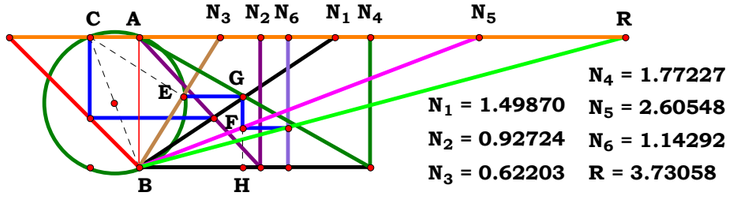
$$Num := \frac{E \cdot N_u^{\,2} \cdot \left[A \cdot C + N_u \cdot (A + B)\right]}{\sqrt{\left[E \cdot N_u^{\,2} \cdot \left[A \cdot C + N_u \cdot (A + B)\right]\right]^2}}$$

$$Den := \frac{D \cdot F \cdot \left(C^2 + N_u^{\,2}\right) \cdot (A + B)}{\sqrt{\left[D \cdot F \cdot \left(C^2 + N_u^{\,2}\right) \cdot (A + B)\right]^2}} \qquad L := \frac{Num}{Den}$$

Num $= 1$ **Den** $= 1$ **L** $= 1$

$$L - \frac{E \cdot N_u^{\,2} \cdot \left[N_u \cdot (A + B) + A \cdot C\right] \cdot \sqrt{D^2 \cdot F^2 \cdot \left(C^2 + N_u^{\,2}\right)^2 \cdot (A + B)^2}}{D \cdot F \cdot \left(C^2 + N_u^{\,2}\right) \cdot (A + B) \cdot \sqrt{E^2 \cdot N_u^{\,4} \cdot \left[N_u \cdot (A + B) + A \cdot C\right]^2}} = 0$$

4RST6B4R15



Unit. $AB := 1$ Given. $N_1 := 1.49870$ $N_2 := .92724$ $N_3 := .62203$

$N_4 := 1.77227$ $N_5 := 2.60548$ $N_6 := 1.14292$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{D\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)}{E\cdot F\cdot\left[A\cdot C+N_u\cdot(A+B)\right]}=3.73055 \qquad Num := \frac{D\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)}{\sqrt{\left[D\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)\right]^2}}$$

$$Den := \frac{E\cdot F\cdot\left[A\cdot C+N_u\cdot(A+B)\right]}{\sqrt{\left[E\cdot F\cdot\left[A\cdot C+N_u\cdot(A+B)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{D\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)\cdot\sqrt{E^2\cdot F^2\cdot\left[N_u\cdot(A+B)+A\cdot C\right]^2}}{E\cdot F\cdot\left[N_u\cdot(A+B)+A\cdot C\right]\cdot\sqrt{D^2\cdot\left(C^2+N_u{}^2\right)^2\cdot(A+B)^2}}=0$$

4RST6AB5R1

Unit.

$AB := 1$

Given.

$N_1 := 1.34373$

$N_2 := 1.74085$

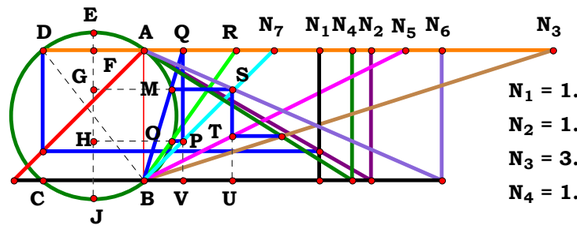
$N_3 := 3.14033$

$N_4 := 1.59793$

$N_5 := 2.00496$

$N_6 := 2.28585$

$N_7 := .99764$



$N_1 = 1.34373$ $N_5 = 2.00496$

$N_2 = 1.74085$ $N_6 = 2.28585$

$N_3 = 3.14033$ $N_7 = 0.99764$

$N_4 = 1.59793$ $R = 0.70882$

Descriptions.

$$AC := \frac{N_1}{N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

$$TU := \frac{N_4}{N_3 + N_4}$$

$$BU := N_5 \cdot TU$$

$$SU := \frac{N_6 - BU}{N_6}$$

$$GJ := SU + EF$$

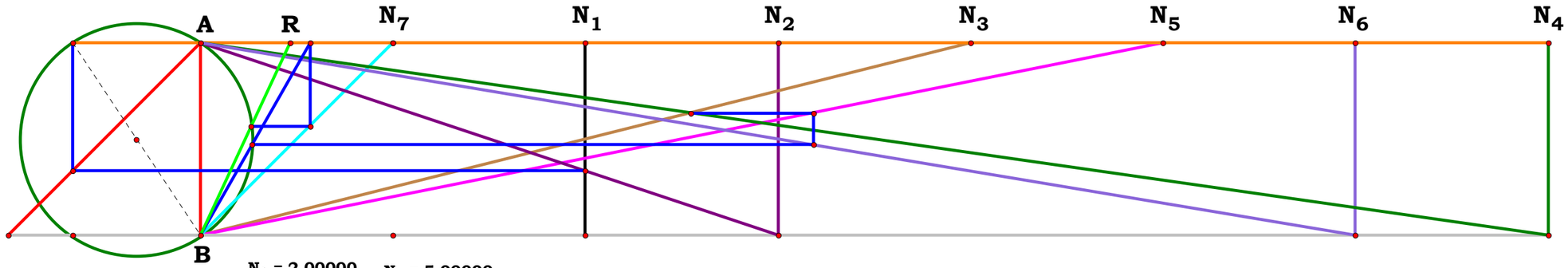
$$GK := \sqrt{GJ \cdot (EJ - GJ)}$$

$$AQ := \frac{GK - AF}{SU}$$

$$PV := \frac{AQ}{N_7} \qquad HJ := PV + EF$$

$$HO := \sqrt{HJ \cdot (EJ - HJ)} \qquad R := \frac{HO - AF}{PV}$$

$R = 0.708821$



$N_1 = 2.00000$ $N_5 = 5.00000$ $AB = 1.00000$ $EF = 0.10093$ $GJ = 0.57062$ $HJ = 0.66901$

$N_2 = 3.00000$ $N_6 = 6.00000$ $AC = 0.66667$ $TU = 0.63636$ $GK = 0.60016$ $HO = 0.59706$

$N_3 = 4.00000$ $N_7 = 1.00000$ $EJ = 1.20185$ $BU = 3.18182$ $AQ = 0.56808$ $R - \frac{HO-AF}{PV} = 0.00000$

$N_4 = 7.00000$ $R = 0.46423$ $AF = 0.33333$ $SU = 0.46970$ $PV = 0.56808$

4RST6AB5R2

Unit.

$AB := 1$

Given.

$N_1 := 1.28562$

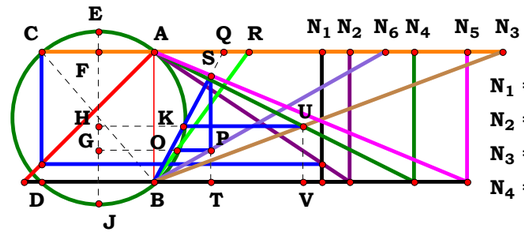
$N_2 := 1.49870$

$N_3 := 2.67541$

$N_4 := 1.99504$

$N_5 := 2.40207$

$N_6 := 1.77250$



$N_1 = 1.28562$ $N_5 = 2.40207$

$N_2 = 1.49870$ $N_6 = 1.77250$

$N_3 = 2.67541$ $R = 0.72925$

$N_4 = 1.99504$

Descriptions.

$AC := \frac{N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

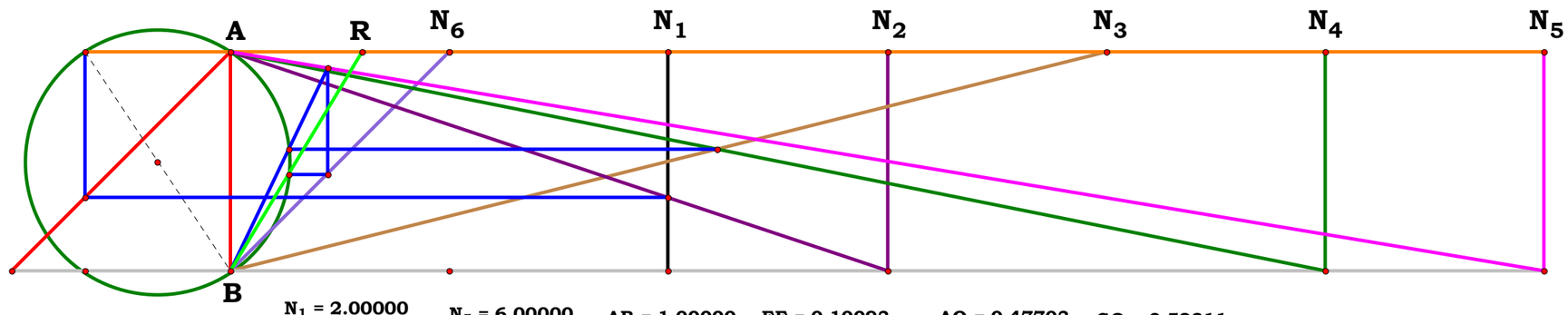
$UV := \frac{N_4}{N_3 + N_4}$ $HJ := UV + EF$

$HK := \sqrt{HJ \cdot (EJ - HJ)}$ $AQ := \frac{HK - AF}{UV}$

$BT := \frac{AQ \cdot N_5}{AQ + N_5}$ $PT := \frac{BT}{N_6}$

$GJ := PT + EF$ $GO := \sqrt{GJ \cdot (EJ - GJ)}$

$R := \frac{GO - AF}{PT}$ $R = 0.729244$



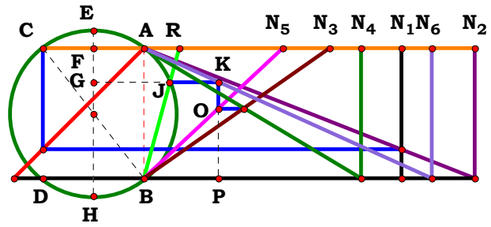
$N_1 = 2.00000$ $N_5 = 6.00000$ $AB = 1.00000$ $EF = 0.10093$ $AQ = 0.47703$ $GO = 0.59811$

$N_2 = 3.00000$ $N_6 = 1.00000$ $AC = 0.66667$ $UV = 0.55556$ $BT = 0.44190$ $R - \frac{GO - AF}{PT} = 0.00000$

$N_3 = 4.00000$ $R = 0.59918$ $EJ = 1.20185$ $HJ = 0.65648$ $PT = 0.44190$

$N_4 = 5.00000$ $AF = 0.33333$ $HK = 0.59835$ $GJ = 0.54282$

4RST6AB5R3



$N_1 = 1.97331$
$N_2 = 2.53508$
$N_3 = 1.42595$
$N_4 = 1.66573$
$N_5 = 1.06544$
$N_6 = 2.20836$
$R = 0.26644$

Unit. $AB := 1$ **Given.** $N_1 := 1.97331$ $N_2 := 2.53508$ $N_3 := 1.42595$ $N_4 := 1.66573$ $N_5 := 1.06544$ $N_6 := 2.20836$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{\sqrt{4\cdot A^2\cdot C\cdot F\cdot(C\cdot E - C\cdot F + D\cdot E) + B^2\cdot E^2\cdot(C+D)^2} - B\cdot E\cdot(C+D)}{2\cdot A\cdot[C\cdot(E-F) + D\cdot E]} = 0.266443$$

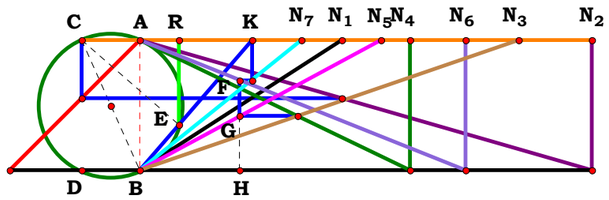
$$Num := \frac{\sqrt{4\cdot A^2\cdot C\cdot F\cdot(C\cdot E - C\cdot F + D\cdot E) + B^2\cdot E^2\cdot(C+D)^2} - B\cdot E\cdot(C+D)}{\sqrt{\left[\sqrt{4\cdot A^2\cdot C\cdot F\cdot(C\cdot E - C\cdot F + D\cdot E) + B^2\cdot E^2\cdot(C+D)^2} - B\cdot E\cdot(C+D)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot[C\cdot(E-F) + D\cdot E]}{\sqrt{[2\cdot A\cdot[C\cdot(E-F) + D\cdot E]]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{B^2\cdot E^2\cdot(C+D)^2 + 4\cdot A^2\cdot C\cdot F\cdot(C\cdot E - C\cdot F + D\cdot E)} - B\cdot E\cdot(C+D)\right]\cdot\sqrt{A^2\cdot[D\cdot E + C\cdot(E-F)]^2}}{A\cdot[D\cdot E + C\cdot(E-F)]\cdot\sqrt{\left[\sqrt{B^2\cdot E^2\cdot(C+D)^2 + 4\cdot A^2\cdot C\cdot F\cdot(C\cdot E - C\cdot F + D\cdot E)} - B\cdot E\cdot(C+D)\right]^2}} = 0$$

4RST6B5R4



$N_1 = 1.54713$ $N_3 = 2.90787$ $N_5 = 1.84998$ $N_7 = 1.23978$

$N_2 = 3.46492$ $N_4 = 2.07253$ $N_6 = 2.49893$ $R = 0.30489$

Unit. $AB := 1$ **Given.** $N_1 := 1.54713$ $N_2 := 3.46492$ $N_3 := 2.90787$ $N_4 := 2.07253$

$N_5 := 1.84998$ $N_6 := 2.49893$ $N_7 := 1.23978$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.

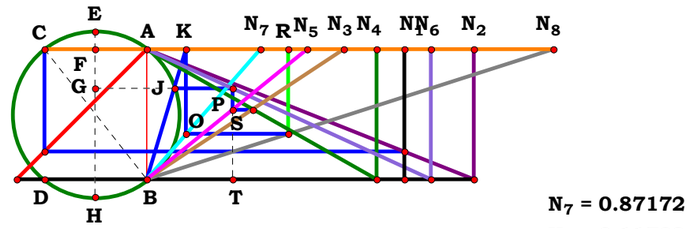
$$\frac{N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[A \cdot E \cdot G \cdot (C + D) - B \cdot N_u \cdot (C \cdot E - C \cdot F + D \cdot E)\right]}{N_u^2 \cdot A \cdot [C \cdot (E - F) + D \cdot E]^2 + A \cdot E^2 \cdot G^2 \cdot (C + D)^2} = 0.30489$$

$$Num := \frac{N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[A \cdot E \cdot G \cdot (C + D) - B \cdot N_u \cdot (C \cdot E - C \cdot F + D \cdot E)\right]}{\sqrt{\left[N_u \cdot [C \cdot (E - F) + D \cdot E] \cdot \left[A \cdot E \cdot G \cdot (C + D) - B \cdot N_u \cdot (C \cdot E - C \cdot F + D \cdot E)\right]\right]^2}}$$

$$Den := \frac{N_u^2 \cdot A \cdot [C \cdot (E - F) + D \cdot E]^2 + A \cdot E^2 \cdot G^2 \cdot (C + D)^2}{\sqrt{\left[N_u^2 \cdot A \cdot [C \cdot (E - F) + D \cdot E]^2 + A \cdot E^2 \cdot G^2 \cdot (C + D)^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot [D \cdot E + C \cdot (E - F)] \cdot \sqrt{\left[A \cdot N_u^2 \cdot [D \cdot E + C \cdot (E - F)]^2 + A \cdot E^2 \cdot G^2 \cdot (C + D)^2\right]^2} \cdot \left[A \cdot E \cdot G \cdot (C + D) - B \cdot N_u \cdot (C \cdot E - C \cdot F + D \cdot E)\right]}{\left[A \cdot N_u^2 \cdot [D \cdot E + C \cdot (E - F)]^2 + A \cdot E^2 \cdot G^2 \cdot (C + D)^2\right] \cdot \sqrt{N_u^2 \cdot [D \cdot E + C \cdot (E - F)]^2 \cdot \left[A \cdot E \cdot G \cdot (C + D) - B \cdot N_u \cdot (C \cdot E - C \cdot F + D \cdot E)\right]^2}} = 0$$



$N_1 = 1.97331$ $N_3 = 1.51312$ $N_5 = 1.23009$ $N_7 = 0.87172$

$N_2 = 2.50603$ $N_4 = 1.76258$ $N_6 = 2.17930$ $N_8 = 3.11709$

$R = 1.08701$

Unit. $AB := 1$ **Given.** $N_1 := 1.97331$ $N_2 := 2.50603$ $N_3 := 1.51312$ $N_4 := 1.76258$

$N_5 := 1.23009$ $N_6 := 2.17930$ $N_7 := .87172$ $N_8 := 3.11709$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5} \quad F := \frac{N_u}{N_6} \quad G := \frac{N_u}{N_7} \quad H := \frac{N_u}{N_8}$$

Descriptions.

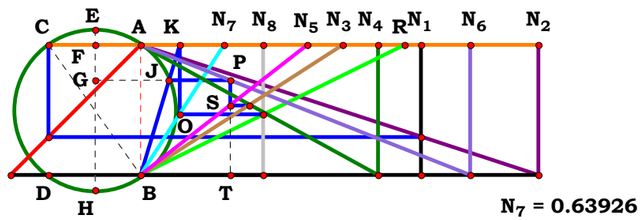
$$\frac{G\cdot\left[\sqrt{4\cdot A^2\cdot C\cdot F\cdot(C\cdot E - C\cdot F + D\cdot E) + B^2\cdot E^2\cdot(C+D)^2} - B\cdot E\cdot(C+D)\right]}{2\cdot A\cdot H\cdot[C\cdot(E-F) + D\cdot E]} = 1.087008$$

$$\text{Num} := \frac{G\cdot\left[\sqrt{4\cdot A^2\cdot C\cdot F\cdot(C\cdot E - C\cdot F + D\cdot E) + B^2\cdot E^2\cdot(C+D)^2} - B\cdot E\cdot(C+D)\right]}{\sqrt{\left[G\cdot\left[\sqrt{4\cdot A^2\cdot C\cdot F\cdot(C\cdot E - C\cdot F + D\cdot E) + B^2\cdot E^2\cdot(C+D)^2} - B\cdot E\cdot(C+D)\right]\right]^2}}$$

$$\text{Den} := \frac{2\cdot A\cdot H\cdot[C\cdot(E-F) + D\cdot E]}{\sqrt{[2\cdot A\cdot H\cdot[C\cdot(E-F) + D\cdot E]]^2}} \qquad L := \frac{\text{Num}}{\text{Den}}$$

$\text{Num} = 1$ $\text{Den} = 1$ $L = 1$

$$L - \frac{G\cdot\left[\sqrt{B^2\cdot E^2\cdot(C+D)^2 + 4\cdot A^2\cdot C\cdot F\cdot(C\cdot E - C\cdot F + D\cdot E)} - B\cdot E\cdot(C+D)\right]\cdot\sqrt{A^2\cdot H^2\cdot[D\cdot E + C\cdot(E-F)]^2}}{A\cdot H\cdot[D\cdot E + C\cdot(E-F)]\cdot\sqrt{G^2\cdot\left[\sqrt{B^2\cdot E^2\cdot(C+D)^2 + 4\cdot A^2\cdot C\cdot F\cdot(C\cdot E - C\cdot F + D\cdot E)} - B\cdot E\cdot(C+D)\right]^2}} = 0$$



$N_7 = 0.63926$

$N_1 = 2.14765$ $N_3 = 1.55186$ $N_5 = 1.27852$ $N_8 = 0.93790$

$N_2 = 3.04843$ $N_4 = 1.82070$ $N_6 = 2.52799$ $R = 2.02073$

Unit. $AB := 1$ **Given.** $N_1 := 2.14765$ $N_2 := 3.04843$ $N_3 := 1.55186$ $N_4 := 1.82070$

$N_5 := 1.27852$ $N_6 := 2.52799$ $N_7 := .63926$ $N_8 := .93790$

$$N_u := 3 \quad A := \frac{N_u}{N_1} \quad B := \frac{N_u}{N_2} \quad C := \frac{N_u}{N_3} \quad D := \frac{N_u}{N_4} \quad E := \frac{N_u}{N_5} \quad F := \frac{N_u}{N_6} \quad G := \frac{N_u}{N_7} \quad H := \frac{N_u}{N_8}$$

Descriptions.

$$\frac{2\cdot A\cdot N_u^{\,2}\cdot[C\cdot(E-F)+D\cdot E]}{G\cdot H\cdot\left[\sqrt{4\cdot A^2\cdot C\cdot F\cdot(C\cdot E-C\cdot F+D\cdot E)+B^2\cdot E^2\cdot(C+D)^2}-B\cdot E\cdot(C+D)\right]}=2.02073$$

$$Num := \frac{2\cdot A\cdot N_u^{\,2}\cdot[C\cdot(E-F)+D\cdot E]}{\sqrt{\left[2\cdot A\cdot N_u^{\,2}\cdot[C\cdot(E-F)+D\cdot E]\right]^2}}$$

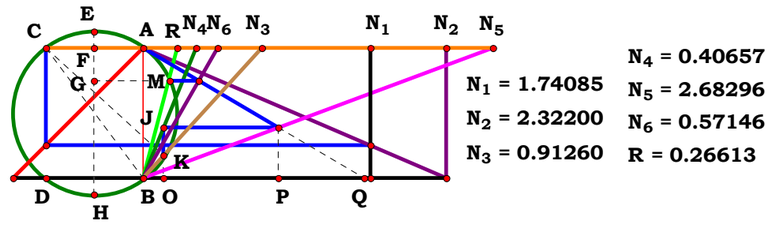
$$Den := \frac{G\cdot H\cdot\left[\sqrt{4\cdot A^2\cdot C\cdot F\cdot(C\cdot E-C\cdot F+D\cdot E)+B^2\cdot E^2\cdot(C+D)^2}-B\cdot E\cdot(C+D)\right]}{\sqrt{\left[G\cdot H\cdot\left[\sqrt{4\cdot A^2\cdot C\cdot F\cdot(C\cdot E-C\cdot F+D\cdot E)+B^2\cdot E^2\cdot(C+D)^2}-B\cdot E\cdot(C+D)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{A\cdot N_u^{\,2}\cdot[D\cdot E+C\cdot(E-F)]\cdot\sqrt{G^2\cdot H^2\cdot\left[\sqrt{B^2\cdot E^2\cdot(C+D)^2+4\cdot A^2\cdot C\cdot F\cdot(C\cdot E-C\cdot F+D\cdot E)}-B\cdot E\cdot(C+D)\right]^2}}{G\cdot H\cdot\left[\sqrt{B^2\cdot E^2\cdot(C+D)^2+4\cdot A^2\cdot C\cdot F\cdot(C\cdot E-C\cdot F+D\cdot E)}-B\cdot E\cdot(C+D)\right]\cdot\sqrt{A^2\cdot N_u^{\,4}\cdot[D\cdot E+C\cdot(E-F)]^2}}=0$$

4RST6B5R9



$N_1 = 1.74085$
$N_2 = 2.32200$
$N_3 = 0.91260$
$N_4 = 0.40657$
$N_5 = 2.68296$
$N_6 = 0.57146$
$R = 0.26613$

Unit. $AB := 1$ **Given.** $N_1 := 1.74085$ $N_2 := 2.32200$ $N_3 := .91260$ $N_4 := .40657$ $N_5 := 2.68296$ $N_6 := .57146$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

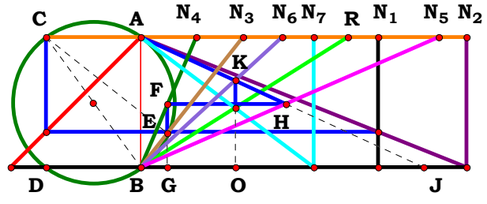
$$\frac{\sqrt{D\cdot F\cdot(A\cdot C-B\cdot N_u)\cdot\left[2\cdot E\cdot\left(2\cdot A^2+B^2\right)\cdot\left[A\cdot C^2-A\cdot D\cdot C+N_u\cdot(B\cdot D+A\cdot N_u)\right]+B^2\cdot D\cdot F\cdot(A\cdot C-B\cdot N_u)\right]+B^2\cdot E^2\cdot\left[A\cdot C^2-A\cdot D\cdot C+N_u\cdot(B\cdot D+A\cdot N_u)\right]^2}-A\cdot B\cdot E\cdot N_u{}^2\ \ldots}{2\cdot A\cdot D\cdot F\cdot(A\cdot C-B\cdot N_u)}+\frac{\left(B^2\cdot D\cdot F-B^2\cdot D\cdot E\right)\cdot N_u-A\cdot B\cdot C\cdot(C\cdot E-D\cdot E+D\cdot F)}{2\cdot A\cdot D\cdot F\cdot(A\cdot C-B\cdot N_u)}=0.266125$$

$$Num := \frac{\sqrt{D\cdot F\cdot(A\cdot C-B\cdot N_u)\cdot\left[2\cdot E\cdot\left(2\cdot A^2+B^2\right)\cdot\left[A\cdot C^2-A\cdot D\cdot C+N_u\cdot(B\cdot D+A\cdot N_u)\right]+B^2\cdot D\cdot F\cdot(A\cdot C-B\cdot N_u)\right]+B^2\cdot E^2\cdot\left[A\cdot C^2-A\cdot D\cdot C+N_u\cdot(B\cdot D+A\cdot N_u)\right]^2}-A\cdot B\cdot E\cdot N_u{}^2\ \ldots+\left(B^2\cdot D\cdot F-B^2\cdot D\cdot E\right)\cdot N_u-A\cdot B\cdot C\cdot(C\cdot E-D\cdot E+D\cdot F)}{\sqrt{\left[\sqrt{D\cdot F\cdot(A\cdot C-B\cdot N_u)\cdot\left[2\cdot E\cdot\left(2\cdot A^2+B^2\right)\cdot\left[A\cdot C^2-A\cdot D\cdot C+N_u\cdot(B\cdot D+A\cdot N_u)\right]+B^2\cdot D\cdot F\cdot(A\cdot C-B\cdot N_u)\right]+B^2\cdot E^2\cdot\left[A\cdot C^2-A\cdot D\cdot C+N_u\cdot(B\cdot D+A\cdot N_u)\right]^2}-A\cdot B\cdot E\cdot N_u{}^2\ \ldots+\left(B^2\cdot D\cdot F-B^2\cdot D\cdot E\right)\cdot N_u-A\cdot B\cdot C\cdot(C\cdot E-D\cdot E+D\cdot F)\right]^2}$$

$$Den := \frac{2\cdot A\cdot D\cdot F\cdot(A\cdot C-B\cdot N_u)}{\sqrt{\left[2\cdot A\cdot D\cdot F\cdot(A\cdot C-B\cdot N_u)\right]^2}} \qquad L := \frac{Num}{Den} \qquad Num = 1 \qquad Den = 1 \qquad L = 1$$

$$L-\frac{\left[\begin{array}{l}\sqrt{B^2\cdot E^2\cdot\left[A\cdot C^2-A\cdot D\cdot C+N_u\cdot(B\cdot D+A\cdot N_u)\right]^2\ \ldots}\ \ldots\\ +\ D\cdot F\cdot\left[2\cdot E\cdot\left(2\cdot A^2+B^2\right)\cdot\left[A\cdot C^2-A\cdot D\cdot C+N_u\cdot(B\cdot D+A\cdot N_u)\right]\ \ldots\right]\cdot(A\cdot C-B\cdot N_u)\\ +\ B^2\cdot D\cdot F\cdot(A\cdot C-B\cdot N_u)\\ +\ \left(B^2\cdot D\cdot F-B^2\cdot D\cdot E\right)\cdot N_u-A\cdot B\cdot C\cdot(C\cdot E-D\cdot E+D\cdot F)-A\cdot B\cdot E\cdot N_u{}^2\end{array}\right]\cdot\sqrt{A^2\cdot D^2\cdot F^2\cdot(A\cdot C-B\cdot N_u)^2}}{A\cdot D\cdot F\cdot\sqrt{\left[\begin{array}{l}\sqrt{B^2\cdot E^2\cdot\left[A\cdot C^2-A\cdot D\cdot C+N_u\cdot(B\cdot D+A\cdot N_u)\right]^2\ \ldots}\ \ldots\\ +\ D\cdot F\cdot\left[2\cdot E\cdot\left(2\cdot A^2+B^2\right)\cdot\left[A\cdot C^2-A\cdot D\cdot C+N_u\cdot(B\cdot D+A\cdot N_u)\right]\ \ldots\right]\cdot(A\cdot C-B\cdot N_u)\\ +\ B^2\cdot D\cdot F\cdot(A\cdot C-B\cdot N_u)\\ +\ \left(B^2\cdot D\cdot F-B^2\cdot D\cdot E\right)\cdot N_u-A\cdot B\cdot C\cdot(C\cdot E-D\cdot E+D\cdot F)-A\cdot B\cdot E\cdot N_u{}^2\end{array}\right]^2}\cdot(A\cdot C-B\cdot N_u)}=0$$

4RST6B5R10



$N_1 = 1.81833$ $N_3 = 0.78668$ $N_5 = 2.28585$ $N_7 = 1.32695$

$N_2 = 2.49634$ $N_4 = 0.42595$ $N_6 = 1.08481$ $R = 1.59029$

Unit. $AB := 1$ **Given.** $N_1 := 1.81833$ $N_2 := 2.49634$ $N_3 := .78668$ $N_4 := .42595$

$N_5 := 2.28585$ $N_6 := 1.08481$ $N_7 := 1.32695$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.

$$\frac{D \cdot N_u \cdot (A \cdot C - B \cdot N_u)}{F \cdot D \cdot (A \cdot C - B \cdot N_u) + \left[E \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot (B \cdot D + A \cdot N_u)\right] - D \cdot G \cdot (A \cdot C - B \cdot N_u)\right]} = 1.590298$$

$$Num := \frac{D \cdot N_u \cdot (A \cdot C - B \cdot N_u)}{\sqrt{\left[D \cdot N_u \cdot (A \cdot C - B \cdot N_u)\right]^2}}$$

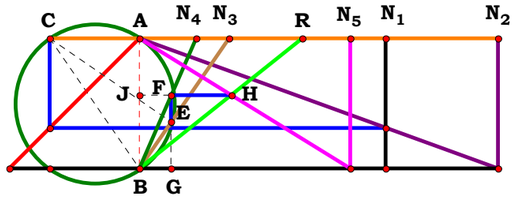
$$Den := \frac{F \cdot D \cdot (A \cdot C - B \cdot N_u) + \left[E \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot (B \cdot D + A \cdot N_u)\right] - D \cdot G \cdot (A \cdot C - B \cdot N_u)\right]}{\sqrt{\left[F \cdot D \cdot (A \cdot C - B \cdot N_u) + \left[E \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot (B \cdot D + A \cdot N_u)\right] - D \cdot G \cdot (A \cdot C - B \cdot N_u)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot N_u \cdot \sqrt{\left[E \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot (B \cdot D + A \cdot N_u)\right] + D \cdot F \cdot (A \cdot C - B \cdot N_u) - D \cdot G \cdot (A \cdot C - B \cdot N_u)\right]^2} \cdot (A \cdot C - B \cdot N_u)}{\sqrt{D^2 \cdot {N_u}^2 \cdot (A \cdot C - B \cdot N_u)^2} \cdot \left[E \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot (B \cdot D + A \cdot N_u)\right] + D \cdot F \cdot (A \cdot C - B \cdot N_u) - D \cdot G \cdot (A \cdot C - B \cdot N_u)\right]} = 0$$

4RST6B5R11



$N_1 = 1.88613$
$N_2 = 2.74817$
$N_3 = 0.68983$
$N_4 = 0.43563$
$N_5 = 1.61753$
$R = 1.24554$

Unit. $AB := 1$ Given. $N_1 := 1.88613$ $N_2 := 2.74817$ $N_3 := .68983$

$N_4 := .43563$ $N_5 := 1.61753$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

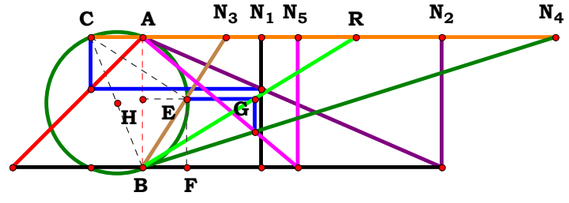
$$\frac{N_u \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]}{D \cdot E \cdot \left(A \cdot C - B \cdot N_u\right)} = 1.245537$$

$$Num := \frac{N_u \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]}{\sqrt{\left[N_u \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]\right]^2}}$$

$$Den := \frac{D \cdot E \cdot \left(A \cdot C - B \cdot N_u\right)}{\sqrt{\left[D \cdot E \cdot \left(A \cdot C - B \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{D^2 \cdot E^2 \cdot \left(A \cdot C - B \cdot N_u\right)^2} \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]}{D \cdot E \cdot \sqrt{N_u{}^2 \cdot \left[A \cdot C^2 - A \cdot D \cdot C + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]^2} \cdot \left(A \cdot C - B \cdot N_u\right)} = 0$$



$N_1 = 0.90787$
$N_2 = 2.29294$
$N_3 = 0.64140$
$N_4 = 3.16702$
$N_5 = 1.19135$
$R = 1.63776$

Unit. $AB := 1$ **Given.** $N_1 := .90787$ $N_2 := 2.29294$ $N_3 := .64140$ $N_4 := 3.16702$ $N_5 := 1.19135$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{C \cdot (D + E) \cdot \left(A \cdot C - B \cdot N_u\right)} = 1.63776$$

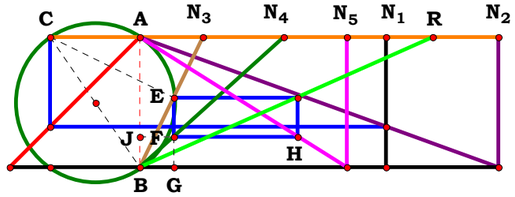
$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{C \cdot (D + E) \cdot \left(A \cdot C - B \cdot N_u\right)}{\sqrt{\left[C \cdot (D + E) \cdot \left(A \cdot C - B \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{C^2 \cdot (D + E)^2 \cdot \left(A \cdot C - B \cdot N_u\right)^2}}{C \cdot (D + E) \cdot \left(A \cdot C - B \cdot N_u\right) \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$

4RST6B5R13



$N_1 = 1.88613$
$N_2 = 2.74817$
$N_3 = 0.48642$
$N_4 = 1.10395$
$N_5 = 1.58847$
$R = 2.24882$

Unit. $AB := 1$ Given. $N_1 := 1.88613$ $N_2 := 2.74817$ $N_3 := .48642$

$N_4 := 1.10395$ $N_5 := 1.58847$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]}{C \cdot E \cdot \left(A \cdot C - B \cdot N_u\right)} = 2.2488$$

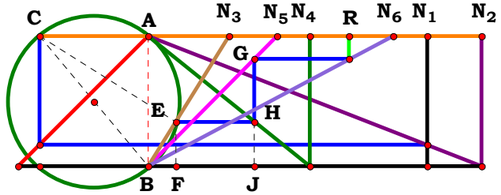
$$Num := \frac{N_u \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]}{\sqrt{\left[N_u \cdot \left[A \cdot C \cdot (C - D) + N_u \cdot \left(B \cdot D + A \cdot N_u\right)\right]\right]^2}}$$

$$Den := \frac{C \cdot E \cdot \left(A \cdot C - B \cdot N_u\right)}{\sqrt{\left[C \cdot E \cdot \left(A \cdot C - B \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[N_u \cdot \left(B \cdot D + A \cdot N_u\right) + A \cdot C \cdot (C - D)\right] \cdot \sqrt{C^2 \cdot E^2 \cdot \left(A \cdot C - B \cdot N_u\right)^2}}{C \cdot E \cdot \sqrt{N_u{}^2 \cdot \left[N_u \cdot \left(B \cdot D + A \cdot N_u\right) + A \cdot C \cdot (C - D)\right]^2} \cdot \left(A \cdot C - B \cdot N_u\right)} = 0$$

4RST6B5R14



$N_1 = 2.13797$
$N_2 = 2.55445$
$N_3 = 0.62203$
$N_4 = 1.23955$
$N_5 = 0.98795$
$N_6 = 1.87904$
$R = 1.54267$

Unit. $AB := 1$ Given. $N_1 := 2.13797$ $N_2 := 2.55446$ $N_3 := .62203$

$N_4 := 1.23955$ $N_5 := .98795$ $N_6 := 1.87904$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

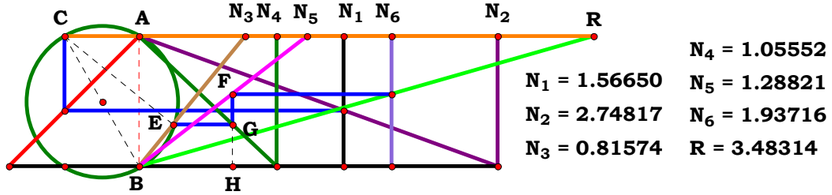
$$\frac{E \cdot N_u^{\,2} \cdot (B \cdot C + A \cdot N_u)}{F \cdot \left[A \cdot D \cdot \left(C^2 + N_u^{\,2}\right)\right]} = 1.542679 \qquad Num := \frac{E \cdot N_u^{\,2} \cdot (B \cdot C + A \cdot N_u)}{\sqrt{\left[E \cdot N_u^{\,2} \cdot (B \cdot C + A \cdot N_u)\right]^2}}$$

$$Den := \frac{F \cdot \left[A \cdot D \cdot \left(C^2 + N_u^{\,2}\right)\right]}{\sqrt{\left[F \cdot \left[A \cdot D \cdot \left(C^2 + N_u^{\,2}\right)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{E \cdot N_u^{\,2} \cdot (B \cdot C + A \cdot N_u) \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot \left(C^2 + N_u^{\,2}\right)^2}}{A \cdot D \cdot F \cdot \left(C^2 + N_u^{\,2}\right) \cdot \sqrt{E^2 \cdot N_u^{\,4} \cdot (B \cdot C + A \cdot N_u)^2}} = 0$$

4RST6B5R15



$N_1 = 1.56650$ $N_4 = 1.05552$

$N_2 = 2.74817$ $N_5 = 1.28821$

$N_3 = 0.81574$ $N_6 = 1.93716$

$R = 3.48314$

Unit. $AB := 1$ Given. $N_1 := 1.56650$ $N_2 := 2.74817$ $N_3 := .81574$

$N_4 := 1.05552$ $N_5 := 1.28821$ $N_6 := 1.93716$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{A \cdot D \cdot \left(C^2 + N_u{}^2\right)}{E \cdot F \cdot \left(B \cdot C + A \cdot N_u\right)} = 3.483165$$

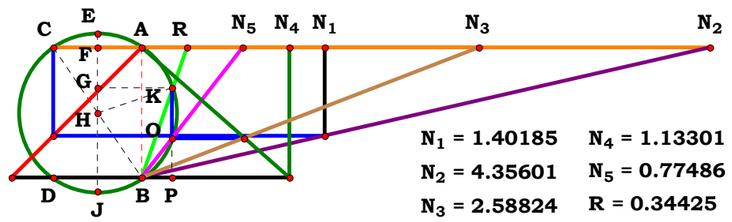
$$Num := \frac{A \cdot D \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot D \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{E \cdot F \cdot \left(B \cdot C + A \cdot N_u\right)}{\sqrt{\left[E \cdot F \cdot \left(B \cdot C + A \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot D \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{E^2 \cdot F^2 \cdot \left(B \cdot C + A \cdot N_u\right)^2}}{E \cdot F \cdot \left(B \cdot C + A \cdot N_u\right) \cdot \sqrt{A^2 \cdot D^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 1.40185$ $N_2 := 4.35601$ $N_3 := 2.58824$

$N_4 := 1.13301$ $N_5 := .77486$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{2\cdot C\cdot\left(\sqrt{N_u}\right)^3\cdot\sqrt{A\cdot B}}{\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot E^2\cdot(C+D)^2-4\cdot A\cdot C^2\cdot N_u^{\,2}-4\cdot N_u\cdot C\cdot E\cdot(C+D)\cdot(A-B)\right]}+\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)} = 0.344251$$

$$Num := \frac{2\cdot C\cdot\left(\sqrt{N_u}\right)^3\cdot\sqrt{A\cdot B}}{\sqrt{\left[2\cdot C\cdot\left(\sqrt{N_u}\right)^3\cdot\sqrt{A\cdot B}\right]^2}}$$

$$Den := \frac{\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot E^2\cdot(C+D)^2-4\cdot A\cdot C^2\cdot N_u^{\,2}-4\cdot N_u\cdot C\cdot E\cdot(C+D)\cdot(A-B)\right]}+\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)}{\sqrt{\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot E^2\cdot(C+D)^2-4\cdot A\cdot C^2\cdot N_u^{\,2}-4\cdot N_u\cdot C\cdot E\cdot(C+D)\cdot(A-B)\right]}+\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\cdot\sqrt{\left[\sqrt{B}\cdot\sqrt{-N_u\cdot\left[4\cdot A\cdot C^2\cdot N_u^{\,2}-A\cdot E^2\cdot(C+D)^2+4\cdot C\cdot E\cdot N_u\cdot(C+D)\cdot(A-B)\right]}+E\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot(C+D)\right]^2}}{\left[\sqrt{B}\cdot\sqrt{-N_u\cdot\left[4\cdot A\cdot C^2\cdot N_u^{\,2}-A\cdot E^2\cdot(C+D)^2+4\cdot C\cdot E\cdot N_u\cdot(C+D)\cdot(A-B)\right]}+E\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot(C+D)\right]\cdot\sqrt{A\cdot B\cdot C^2\cdot N_u^{\,3}}} = 0$$

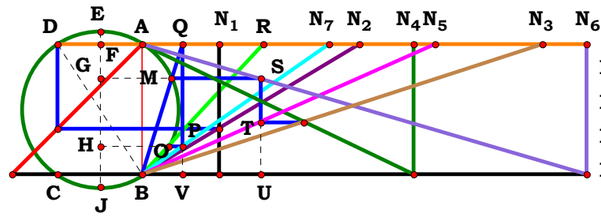
4RST6AB6R1

Unit.

$AB := 1$

Given.

$N_1 := .58824$ $N_2 := 1.66336$ $N_3 := 3.07253$ $N_4 := 2.08221$ $N_5 := 2.24710$ $N_6 := 3.40940$ $N_7 := 1.43350$



$N_1 = 0.58824$ $N_5 = 2.24710$
$N_2 = 1.66336$ $N_6 = 3.40940$
$N_3 = 3.07253$ $N_7 = 1.43350$
$N_4 = 2.08221$ $R = 0.93106$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

$$TU := \frac{N_4}{N_3 + N_4}$$

$$BU := N_5 \cdot TU$$

$$SU := \frac{N_6 - BU}{N_6}$$

$$GJ := SU + EF$$

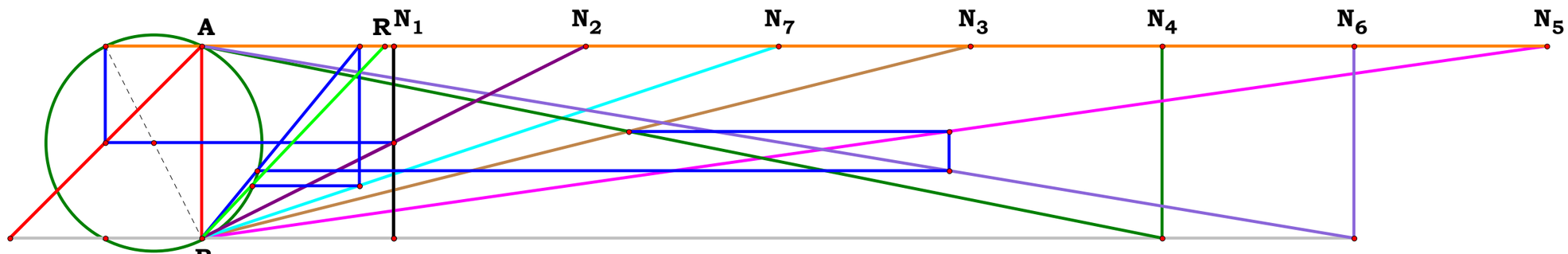
$$GK := \sqrt{GJ \cdot (EJ - GJ)}$$

$$AQ := \frac{GK - AF}{SU}$$

$$PV := \frac{AQ}{N_7} \qquad HJ := PV + EF$$

$$HO := \sqrt{HJ \cdot (EJ - HJ)} \qquad R := \frac{HO - AF}{PV}$$

$R = 0.931063$



$N_1 = 1.00000$ $N_5 = 7.00000$ $AB = 1.00000$ $EF = 0.05902$ $GJ = 0.41087$ $HJ = 0.33283$
$N_2 = 2.00000$ $N_6 = 6.00000$ $AC = 0.50000$ $TU = 0.55556$ $GK = 0.53903$ $HO = 0.51122$
$N_3 = 4.00000$ $N_7 = 3.00000$ $EJ = 1.11803$ $BU = 3.88889$ $AQ = 0.82145$ $R\text{-}\frac{HO\text{-}AF}{PV} = 0.00000$
$N_4 = 5.00000$ $R = 0.95398$ $AF = 0.25000$ $SU = 0.35185$ $PV = 0.27382$

4RST6AB6R2

Unit.

$AB := 1$

Given.

$N_1 := .55918$

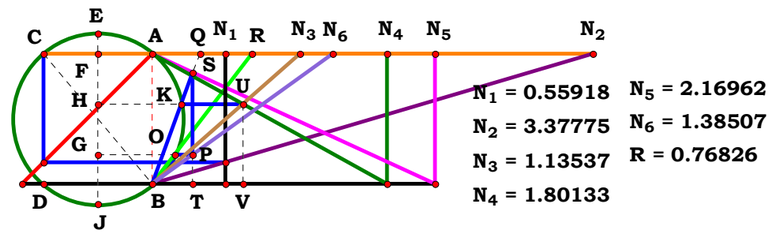
$N_2 := 3.37775$

$N_3 := 1.13537$

$N_4 := 1.80133$

$N_5 := 2.16962$

$N_6 := 1.38507$



$N_1 = 0.55918$ $N_5 = 2.16962$

$N_2 = 3.37775$ $N_6 = 1.38507$

$N_3 = 1.13537$ $R = 0.76826$

$N_4 = 1.80133$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

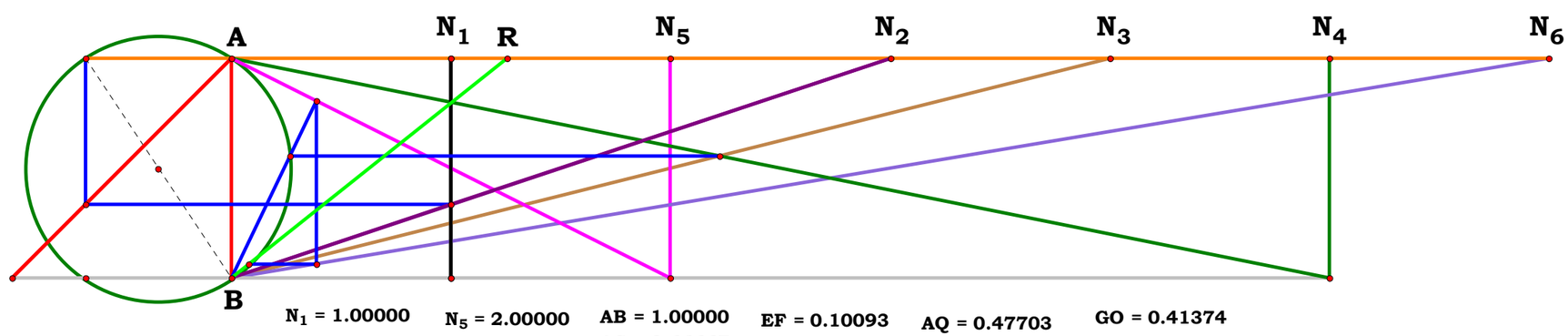
$$UV := \frac{N_4}{N_3 + N_4} \qquad HJ := UV + EF$$

$$HK := \sqrt{HJ \cdot (EJ - HJ)} \qquad AQ := \frac{HK - AF}{UV}$$

$$BT := \frac{AQ \cdot N_5}{AQ + N_5} \qquad PT := \frac{BT}{N_6}$$

$$GJ := PT + EF \qquad GO := \sqrt{GJ \cdot (EJ - GJ)}$$

$$R := \frac{GO - AF}{PT} \qquad R = 0.768258$$

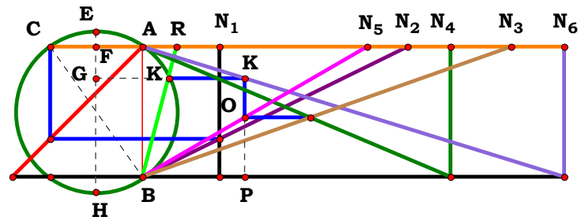


$N_1 = 1.00000$ $N_5 = 2.00000$ $AB = 1.00000$ $EF = 0.10093$ $AQ = 0.47703$ $GO = 0.41374$

$N_2 = 3.00000$ $N_6 = 6.00000$ $AC = 0.66667$ $UV = 0.55556$ $BT = 0.38516$ $R\text{-}\frac{GO\text{-}AF}{PT} = 0.00000$

$N_3 = 4.00000$ $R = 1.25262$ $EJ = 1.20185$ $HJ = 0.65648$ $PT = 0.06419$

$N_4 = 5.00000$ $AF = 0.33333$ $HK = 0.59835$ $GJ = 0.16512$



$N_1 = 0.58824$
$N_2 = 2.03142$
$N_3 = 2.83038$
$N_4 = 2.36310$
$N_5 = 1.72407$
$N_6 = 3.23505$
$R = 0.26593$

Unit. $AB := 1$ Given. $N_1 := .58824$ $N_2 := 2.03142$ $N_3 := 2.83038$

$N_4 := 2.36310$ $N_5 := 1.72407$ $N_6 := 3.23505$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

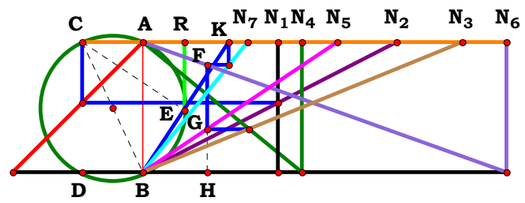
$$\frac{\sqrt{4\cdot A^2\cdot C\cdot F\cdot(C\cdot E-C\cdot F+D\cdot E)+E^2\cdot(C+D)^2\cdot(A-B)^2}-E\cdot(C+D)\cdot(A-B)}{2\cdot A\cdot(C\cdot E-C\cdot F+D\cdot E)} = 0.265928$$

$$Num := \frac{\sqrt{4\cdot A^2\cdot C\cdot F\cdot(C\cdot E-C\cdot F+D\cdot E)+E^2\cdot(C+D)^2\cdot(A-B)^2}-E\cdot(C+D)\cdot(A-B)}{\sqrt{\left[\sqrt{4\cdot A^2\cdot C\cdot F\cdot(C\cdot E-C\cdot F+D\cdot E)+E^2\cdot(C+D)^2\cdot(A-B)^2}-E\cdot(C+D)\cdot(A-B)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot(C\cdot E-C\cdot F+D\cdot E)}{\sqrt{[2\cdot A\cdot(C\cdot E-C\cdot F+D\cdot E)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{A^2\cdot(C\cdot E-C\cdot F+D\cdot E)^2}\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2+4\cdot A^2\cdot C\cdot F\cdot(C\cdot E-C\cdot F+D\cdot E)}-E\cdot(C+D)\cdot(A-B)\right]}{A\cdot\sqrt{\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2+4\cdot A^2\cdot C\cdot F\cdot(C\cdot E-C\cdot F+D\cdot E)}-E\cdot(C+D)\cdot(A-B)\right]^2}\cdot(C\cdot E-C\cdot F+D\cdot E)} = 0$$



$N_1 = 1.03379$ $N_3 = 2.45264$ $N_5 = 1.49161$ $N_7 = 0.80392$

$N_2 = 1.94425$ $N_4 = 1.22018$ $N_6 = 2.78951$ $R = 0.31762$

Unit. $AB := 1$ **Given.** $N_1 := 1.03379$ $N_2 := 1.94425$ $N_3 := 2.45264$ $N_4 := 1.22018$

$N_5 := 1.49161$ $N_6 := 2.78951$ $N_7 := .80392$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.

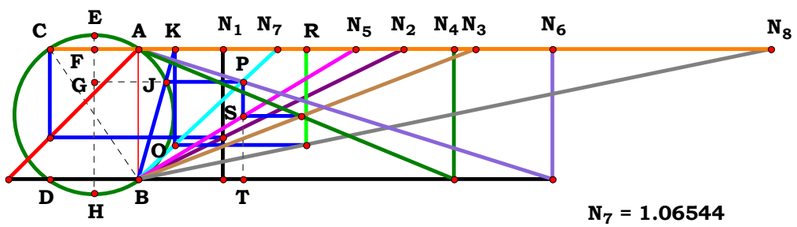
$$\frac{N_u\cdot(C\cdot E - C\cdot F + D\cdot E)\cdot\left[A\cdot E\cdot G\cdot(C+D) - N_u\cdot(A-B)\cdot(C\cdot E - C\cdot F + D\cdot E)\right]}{A\cdot\left[{N_u}^2\cdot(C\cdot E - C\cdot F + D\cdot E)^2 + E^2\cdot G^2\cdot(C+D)^2\right]} = 0.317619$$

$$\text{Num} := \frac{N_u\cdot(C\cdot E - C\cdot F + D\cdot E)\cdot\left[A\cdot E\cdot G\cdot(C+D) - N_u\cdot(A-B)\cdot(C\cdot E - C\cdot F + D\cdot E)\right]}{\sqrt{\left[N_u\cdot(C\cdot E - C\cdot F + D\cdot E)\cdot\left[A\cdot E\cdot G\cdot(C+D) - N_u\cdot(A-B)\cdot(C\cdot E - C\cdot F + D\cdot E)\right]\right]^2}}$$

$$\text{Den} := \frac{A\cdot\left[{N_u}^2\cdot(C\cdot E - C\cdot F + D\cdot E)^2 + E^2\cdot G^2\cdot(C+D)^2\right]}{\sqrt{\left[A\cdot\left[{N_u}^2\cdot(C\cdot E - C\cdot F + D\cdot E)^2 + E^2\cdot G^2\cdot(C+D)^2\right]\right]^2}} \qquad L := \frac{\text{Num}}{\text{Den}}$$

$\text{Num} = 1$ $\text{Den} = 1$ $L = 1$

$$L - \frac{N_u\cdot\left[A\cdot E\cdot G\cdot(C+D) - N_u\cdot(A-B)\cdot(C\cdot E - C\cdot F + D\cdot E)\right]\cdot\sqrt{A^2\cdot\left[{N_u}^2\cdot(C\cdot E - C\cdot F + D\cdot E)^2 + E^2\cdot G^2\cdot(C+D)^2\right]^2}\cdot(C\cdot E - C\cdot F + D\cdot E)}{A\cdot\left[{N_u}^2\cdot(C\cdot E - C\cdot F + D\cdot E)^2 + E^2\cdot G^2\cdot(C+D)^2\right]\cdot\sqrt{{N_u}^2\cdot\left[A\cdot E\cdot G\cdot(C+D) - N_u\cdot(A-B)\cdot(C\cdot E - C\cdot F + D\cdot E)\right]^2\cdot(C\cdot E - C\cdot F + D\cdot E)^2}} = 0$$



$N_1 = 0.64635$ $N_3 = 2.58824$ $N_5 = 1.66595$ $N_7 = 1.06544$

$N_2 = 2.03142$ $N_4 = 2.42122$ $N_6 = 3.17694$ $N_8 = 4.84868$

$R = 1.29081$

Unit. $AB := 1$ **Given.** $N_1 := .64635$ $N_2 := 2.03142$ $N_3 := 2.58824$ $N_4 := 2.42122$

$N_5 := 1.66595$ $N_6 := 3.17694$ $N_7 := 1.06544$ $N_8 := 4.84868$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

Descriptions.

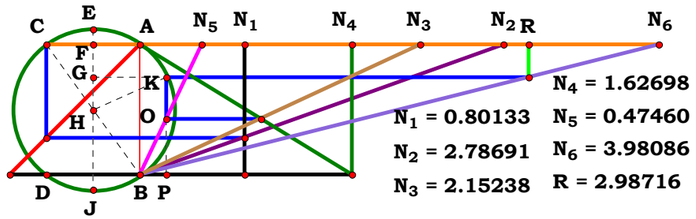
$$\frac{G\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2+4\cdot E\cdot A^2\cdot C\cdot F\cdot(C+D)-4\cdot A^2\cdot C^2\cdot F^2}-E\cdot(C+D)\cdot(A-B)\right]}{2\cdot A\cdot H\cdot(C\cdot E-C\cdot F+D\cdot E)} = 1.290805$$

$$Num := \frac{G\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2+4\cdot E\cdot A^2\cdot C\cdot F\cdot(C+D)-4\cdot A^2\cdot C^2\cdot F^2}-E\cdot(C+D)\cdot(A-B)\right]}{\sqrt{\left[G\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2+4\cdot E\cdot A^2\cdot C\cdot F\cdot(C+D)-4\cdot A^2\cdot C^2\cdot F^2}-E\cdot(C+D)\cdot(A-B)\right]\right]^2}}$$

$$Den := \frac{2\cdot A\cdot H\cdot(C\cdot E-C\cdot F+D\cdot E)}{\sqrt{[2\cdot A\cdot H\cdot(C\cdot E-C\cdot F+D\cdot E)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{G\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot A^2\cdot C^2\cdot F^2+4\cdot A^2\cdot C\cdot E\cdot F\cdot(C+D)}-E\cdot(C+D)\cdot(A-B)\right]\cdot\sqrt{A^2\cdot H^2\cdot(C\cdot E-C\cdot F+D\cdot E)^2}}{A\cdot H\cdot\sqrt{G^2\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2-4\cdot A^2\cdot C^2\cdot F^2+4\cdot A^2\cdot C\cdot E\cdot F\cdot(C+D)}-E\cdot(C+D)\cdot(A-B)\right]^2}\cdot(C\cdot E-C\cdot F+D\cdot E)} = 0$$



Unit. $AB := 1$ Given. $N_1 := .80133$ $N_2 := 2.78691$ $N_3 := 2.15238$

$N_4 := 1.62698$ $N_5 := .47460$ $N_6 := 3.98086$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{\sqrt{N_u}\cdot\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[E\cdot\left[A\cdot E\cdot(C+D)-4\cdot C\cdot N_u\cdot(A-B)\right]\cdot(C+D)-4\cdot A\cdot C^2\cdot N_u{}^2\right]}+\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]}{2\cdot F\cdot(C+D)\cdot\sqrt{A\cdot B}\cdot E}=2.987175$$

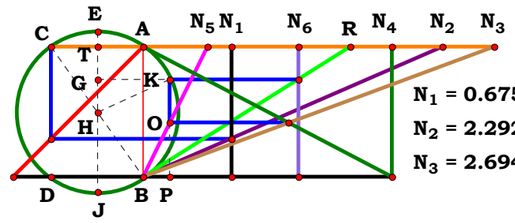
$$Num := \frac{\sqrt{N_u}\cdot\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[E\cdot\left[A\cdot E\cdot(C+D)-4\cdot C\cdot N_u\cdot(A-B)\right]\cdot(C+D)-4\cdot A\cdot C^2\cdot N_u{}^2\right]}+\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]}{\sqrt{\left[\sqrt{N_u}\cdot\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[E\cdot\left[A\cdot E\cdot(C+D)-4\cdot C\cdot N_u\cdot(A-B)\right]\cdot(C+D)-4\cdot A\cdot C^2\cdot N_u{}^2\right]}+\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]\right]^2}}$$

$$Den := \frac{2\cdot F\cdot(C+D)\cdot\sqrt{A\cdot B}\cdot E}{\sqrt{\left[2\cdot F\cdot(C+D)\cdot\sqrt{A\cdot B}\cdot E\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{N_u}\cdot\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[E\cdot\left[A\cdot E\cdot(C+D)-4\cdot C\cdot N_u\cdot(A-B)\right]\cdot(C+D)-4\cdot A\cdot C^2\cdot N_u{}^2\right]}+E\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot(C+D)\right]\cdot\sqrt{A\cdot B\cdot E^2\cdot F^2\cdot(C+D)^2}}{E\cdot F\cdot\sqrt{A\cdot B}\cdot(C+D)\cdot\sqrt{N_u\cdot\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[E\cdot\left[A\cdot E\cdot(C+D)-4\cdot C\cdot N_u\cdot(A-B)\right]\cdot(C+D)-4\cdot A\cdot C^2\cdot N_u{}^2\right]}+E\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot(C+D)\right]^2}}=0$$

4RST6B6R7



$N_1 = 0.67541$ $N_2 = 2.29294$ $N_3 = 2.69478$ $N_4 = 1.90787$ $N_5 = 0.49397$ $N_6 = 1.19135$ $R = 1.58373$

Unit. $AB := 1$ **Given.** $N_1 := .67541$ $N_2 := 2.29294$ $N_3 := 2.69478$ $N_4 := 1.90787$ $N_5 := .49397$ $N_6 := 1.19135$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(C+D)\cdot\sqrt{A\cdot B}\cdot E}{F\cdot\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[E\cdot\left[A\cdot E\cdot(C+D)-4\cdot C\cdot N_u\cdot(A-B)\right]\cdot(C+D)-4\cdot A\cdot C^2\cdot {N_u}^2\right]}+\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]} = 1.583718$$

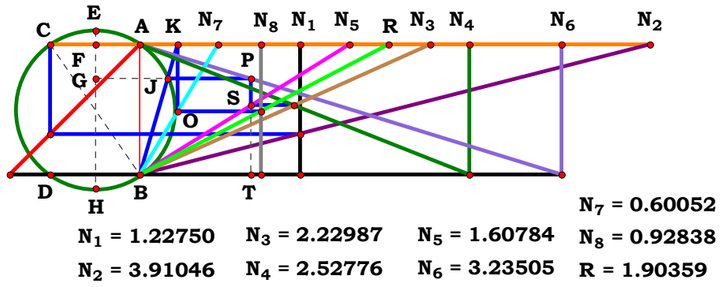
$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(C+D)\cdot\sqrt{A\cdot B}\cdot E}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^3\cdot(C+D)\cdot\sqrt{A\cdot B}\cdot E\right]^2}}$$

$$Den := \frac{F\cdot\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[E\cdot\left[A\cdot E\cdot(C+D)-4\cdot C\cdot N_u\cdot(A-B)\right]\cdot(C+D)-4\cdot A\cdot C^2\cdot {N_u}^2\right]}+\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]}{\sqrt{\left[F\cdot\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[E\cdot\left[A\cdot E\cdot(C+D)-4\cdot C\cdot N_u\cdot(A-B)\right]\cdot(C+D)-4\cdot A\cdot C^2\cdot {N_u}^2\right]}+\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot E\cdot(C+D)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den = 1** **L = 1**

$$L - \frac{E\cdot {N_u}^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\cdot(C+D)\cdot\sqrt{F^2\cdot\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[E\cdot\left[A\cdot E\cdot(C+D)-4\cdot C\cdot N_u\cdot(A-B)\right]\cdot(C+D)-4\cdot A\cdot C^2\cdot {N_u}^2\right]}+E\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot(C+D)\right]^2}}{F\cdot\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[E\cdot\left[A\cdot E\cdot(C+D)-4\cdot C\cdot N_u\cdot(A-B)\right]\cdot(C+D)-4\cdot A\cdot C^2\cdot {N_u}^2\right]}+E\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot(C+D)\right]\cdot\sqrt{A\cdot B\cdot E^2\cdot {N_u}^3\cdot(C+D)^2}} = 0$$



Unit. $AB := 1$ Given. $N_1 := 1.22750$ $N_2 := 3.91046$ $N_3 := 2.22987$ $N_4 := 2.52776$

$N_5 := 1.60784$ $N_6 := 3.23505$ $N_7 := .60052$ $N_8 := .92838$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$ $H := \frac{N_u}{N_8}$

Descriptions.

$$\frac{2\cdot A\cdot N_u{}^2\cdot(C\cdot E - C\cdot F + D\cdot E)}{G\cdot H\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2 + 4\cdot A^2\cdot C\cdot F\cdot[C\cdot(E-F)+D\cdot E]} - E\cdot(C+D)\cdot(A-B)\right]} = 1.903602$$

$$Num := \frac{2\cdot A\cdot N_u{}^2\cdot(C\cdot E - C\cdot F + D\cdot E)}{\sqrt{\left[2\cdot A\cdot N_u{}^2\cdot(C\cdot E - C\cdot F + D\cdot E)\right]^2}}$$

$$Den := \frac{G\cdot H\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2 + 4\cdot A^2\cdot C\cdot F\cdot[C\cdot(E-F)+D\cdot E]} - E\cdot(C+D)\cdot(A-B)\right]}{\sqrt{\left[G\cdot H\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2 + 4\cdot A^2\cdot C\cdot F\cdot[C\cdot(E-F)+D\cdot E]} - E\cdot(C+D)\cdot(A-B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A\cdot N_u{}^2\cdot\sqrt{G^2\cdot H^2\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2 + 4\cdot A^2\cdot C\cdot F\cdot[D\cdot E + C\cdot(E-F)]} - E\cdot(C+D)\cdot(A-B)\right]^2}\cdot(C\cdot E - C\cdot F + D\cdot E)}{G\cdot H\cdot\left[\sqrt{E^2\cdot(C+D)^2\cdot(A-B)^2 + 4\cdot A^2\cdot C\cdot F\cdot[D\cdot E + C\cdot(E-F)]} - E\cdot(C+D)\cdot(A-B)\right]\cdot\sqrt{A^2\cdot N_u{}^4\cdot(C\cdot E - C\cdot F + D\cdot E)^2}} = 0$$

4RST6AB6R9

Unit.

$AB := 1$

Given.

$N_1 := .74321$

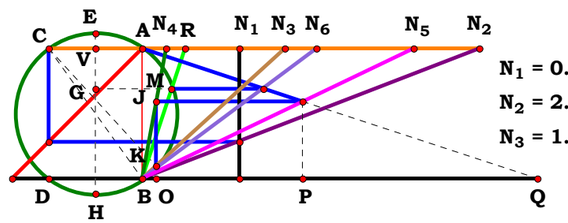
$N_2 := 2.58351$

$N_3 := 1.09663$

$N_4 := .18380$

$N_5 := 2.08244$

$N_6 := 1.33664$



$N_1 = 0.74321$ $N_4 = 0.18380$

$N_2 = 2.58351$ $N_5 = 2.08244$

$N_3 = 1.09663$ $N_6 = 1.33664$

$R = 0.32601$

Descriptions.

$$AC := \frac{N_2 - N_1}{N_2} \qquad EH := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EH - AB}{2}$$

$$BN_3 := \sqrt{N_3^2 + AB^2} \qquad CN_3 := N_3 + AC$$

$$KN_3 := \frac{N_3 \cdot CN_3}{BN_3}$$

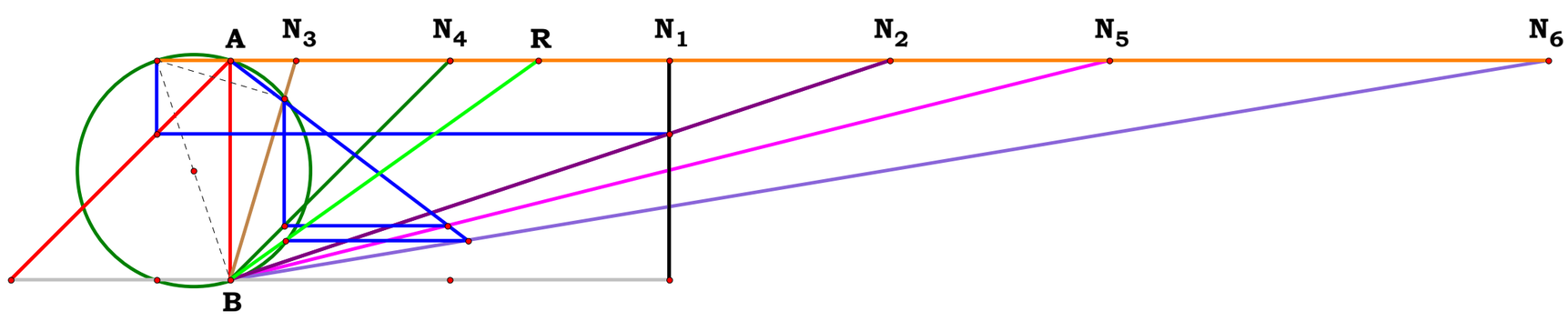
$$BO := \frac{N_3 \cdot (BN_3 - KN_3)}{BN_3}$$

$$JO := \frac{BO}{N_4} \qquad BP := N_5 \cdot JO$$

$$BQ := \frac{BP \cdot AB}{AB - JO} \qquad FG := \frac{N_6}{BQ + N_6}$$

$$EG := FG + EF \qquad GM := \sqrt{EG \cdot (EH - EG)}$$

$$R := \frac{GM - AF}{AB - FG} \qquad R = 0.32601$$



$N_1 = 2.00000$ $N_4 = 1.00000$ $AB = 1.00000$ $EF = 0.02705$ $BO = 0.24771$ $FG = 0.82000$

$N_2 = 3.00000$ $N_5 = 4.00000$ $AC = 0.33333$ $BN_3 = 1.04403$ $JO = 0.24771$ $EG = 0.84705$

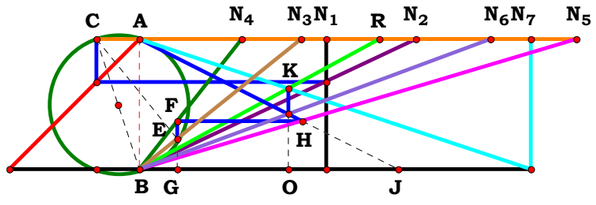
$N_3 = 0.30000$ $N_6 = 6.00000$ $EH = 1.05409$ $CN_3 = 0.63333$ $BP = 0.99083$ $GM = 0.41878$

$R = 1.40064$ $AF = 0.16667$ $KN_3 = 0.18199$ $BQ = 1.31707$ $R - \frac{GM - AF}{AB - FG} = 0.00000$

Definitions.

$$R - \frac{\sqrt{N_6^2 \cdot (N_1 - N_2)^2 \cdot \left[N_3^2 \cdot (N_1 - N_2 - N_2 \cdot N_4) + N_2 \cdot (N_3 - N_4)\right]^2 + N_3^2 \cdot N_5^2 \cdot (N_1 - N_2)^2 \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)^2 \ \ldots \ \ldots}{+ \ -2 \cdot N_3 \cdot N_5 \cdot N_6 \cdot \left(N_1^2 - 2 \cdot N_1 \cdot N_2 + 3 \cdot N_2^2\right) \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3) \cdot \left[N_3^2 \cdot (N_1 - N_2 - N_2 \cdot N_4) + N_2 \cdot (N_3 - N_4)\right]}$$
$$+ \ (N_1 - N_2) \cdot \left[(N_1 - N_2) \cdot (N_5 - N_6) \cdot N_3^2 + N_2 \cdot \left[N_6 \cdot \left(N_3^2 \cdot N_4 - N_3 + N_4\right) + N_3 \cdot N_5\right]\right]$$
$$2 \cdot N_2 \cdot N_3 \cdot N_5 \cdot (N_2 + N_1 \cdot N_3 - N_2 \cdot N_3)$$
$$= 0$$

4RST6B6R10



$N_1 = 1.43090$ $N_3 = 1.24192$ $N_5 = 3.35128$ $N_7 = 3.00259$

$N_2 = 2.11859$ $N_4 = 0.78432$ $N_6 = 2.69265$ $R = 1.84291$

Unit. $AB := 1$ **Given.** $N_1 := 1.43090$ $N_2 := 2.11859$ $N_3 := 1.24192$ $N_4 := .78432$

$N_5 := 3.35128$ $N_6 := 2.69265$ $N_7 := 3.00259$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$ $G := \frac{N_u}{N_7}$

Descriptions.

$$\frac{D \cdot N_u \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)}{E \cdot \left[A \cdot {N_u}^2 + (A \cdot D - B \cdot D) \cdot N_u + A \cdot C \cdot (C - D)\right] + D \cdot (F - G) \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)} = 1.842898$$

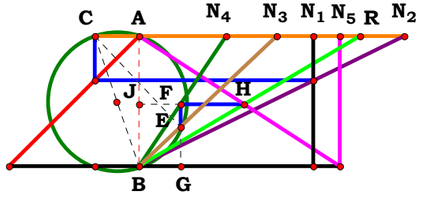
$$Num := \frac{D \cdot N_u \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)}{\sqrt{\left[D \cdot N_u \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)\right]^2}}$$

$$Den := \frac{E \cdot \left[A \cdot {N_u}^2 + (A \cdot D - B \cdot D) \cdot N_u + A \cdot C \cdot (C - D)\right] + D \cdot (F - G) \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)}{\sqrt{\left[E \cdot \left[A \cdot {N_u}^2 + (A \cdot D - B \cdot D) \cdot N_u + A \cdot C \cdot (C - D)\right] + D \cdot (F - G) \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot N_u \cdot \sqrt{\left[E \cdot \left[A \cdot {N_u}^2 + (A \cdot D - B \cdot D) \cdot N_u + A \cdot C \cdot (C - D)\right] + D \cdot (F - G) \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)\right]^2} \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)}{\left[E \cdot \left[A \cdot {N_u}^2 + (A \cdot D - B \cdot D) \cdot N_u + A \cdot C \cdot (C - D)\right] + D \cdot (F - G) \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)\right] \cdot \sqrt{D^2 \cdot {N_u}^2 \cdot (A \cdot C - A \cdot N_u + B \cdot N_u)^2}} = 0$$



$N_1 = 1.33405$
$N_2 = 2.03142$
$N_3 = 1.05789$
$N_4 = 0.66809$
$N_5 = 1.54004$
$R = 1.69633$

Unit. $AB := 1$ Given. $N_1 := 1.33405$ $N_2 := 2.03142$ $N_3 := 1.05789$

$N_4 := .66809$ $N_5 := 1.54004$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{N_u \cdot \left[A \cdot C^2 + A \cdot {N_u}^2 - A \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]}{A \cdot C \cdot D \cdot E - D \cdot E \cdot N_u \cdot (A - B)} = 1.696324$$

$$Num := \frac{N_u \cdot \left[A \cdot C^2 + A \cdot {N_u}^2 - A \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[N_u \cdot \left[A \cdot C^2 + A \cdot {N_u}^2 - A \cdot C \cdot D + D \cdot N_u \cdot (A - B)\right]\right]^2}}$$

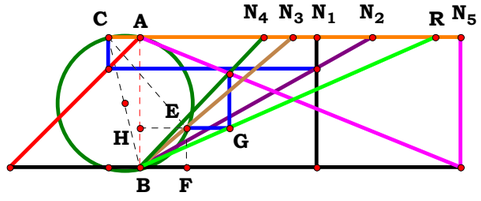
$$Den := \frac{A \cdot C \cdot D \cdot E - D \cdot E \cdot N_u \cdot (A - B)}{\sqrt{\left[A \cdot C \cdot D \cdot E - D \cdot E \cdot N_u \cdot (A - B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[A \cdot C \cdot D \cdot E - D \cdot E \cdot N_u \cdot (A - B)\right]^2} \cdot \left[A \cdot C^2 - A \cdot D \cdot C + A \cdot {N_u}^2 + D \cdot (A - B) \cdot N_u\right]}{\sqrt{{N_u}^2 \cdot \left[A \cdot C^2 - A \cdot D \cdot C + A \cdot {N_u}^2 + D \cdot (A - B) \cdot N_u\right]^2} \cdot \left[A \cdot C \cdot D \cdot E - D \cdot E \cdot N_u \cdot (A - B)\right]} = 0$$

4RST6B6R12



$N_1 = 1.35342$
$N_2 = 1.77959$
$N_3 = 1.17412$
$N_4 = 0.94898$
$N_5 = 2.46019$
$R = 2.26603$

Unit. $AB := 1$ **Given.** $N_1 := 1.35342$ $N_2 := 1.77959$ $N_3 := 1.17412$

$N_4 := .94898$ $N_5 := 2.46019$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

$$\frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{C \cdot (D + E) \cdot \left(A \cdot C - A \cdot N_u + B \cdot N_u\right)} = 2.266037$$

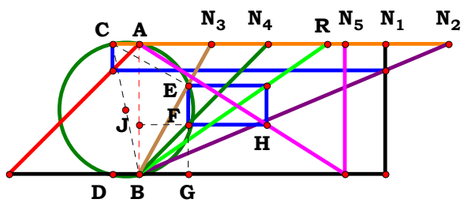
$$Num := \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot N_u \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{C \cdot (D + E) \cdot \left(A \cdot C - A \cdot N_u + B \cdot N_u\right)}{\sqrt{\left[C \cdot (D + E) \cdot \left(A \cdot C - A \cdot N_u + B \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{C^2 \cdot (D + E)^2 \cdot \left(A \cdot C - A \cdot N_u + B \cdot N_u\right)^2}}{C \cdot (D + E) \cdot \sqrt{A^2 \cdot N_u{}^2 \cdot \left(C^2 + N_u{}^2\right)^2} \cdot \left(A \cdot C - A \cdot N_u + B \cdot N_u\right)} = 0$$



$N_1 = 1.88613$
$N_2 = 2.37042$
$N_3 = 0.55423$
$N_4 = 0.98772$
$N_5 = 1.57878$
$R = 1.44137$

Unit. $AB := 1$ Given. $N_1 := 1.88613$ $N_2 := 2.37042$ $N_3 := .55423$

$N_4 := .98772$ $N_5 := 1.57878$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$

Descriptions.

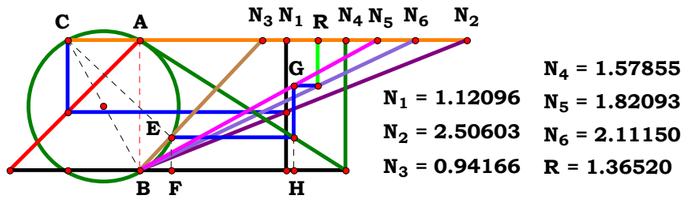
$$\frac{N_u \cdot \left[A \cdot \left(C^2 - D \cdot C + {N_u}^2\right) + D \cdot N_u \cdot (A - B)\right]}{A \cdot C^2 \cdot E - C \cdot E \cdot N_u \cdot (A - B)} = 1.44137$$

$$Num := \frac{N_u \cdot \left[A \cdot \left(C^2 - D \cdot C + {N_u}^2\right) + D \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[N_u \cdot \left[A \cdot \left(C^2 - D \cdot C + {N_u}^2\right) + D \cdot N_u \cdot (A - B)\right]\right]^2}}$$

$$Den := \frac{A \cdot C^2 \cdot E - C \cdot E \cdot N_u \cdot (A - B)}{\sqrt{\left[A \cdot C^2 \cdot E - C \cdot E \cdot N_u \cdot (A - B)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[A \cdot C^2 \cdot E - C \cdot E \cdot N_u \cdot (A - B)\right]^2} \cdot \left[A \cdot \left(C^2 - D \cdot C + {N_u}^2\right) + D \cdot N_u \cdot (A - B)\right]}{\left[A \cdot C^2 \cdot E - C \cdot E \cdot N_u \cdot (A - B)\right] \cdot \sqrt{{N_u}^2 \cdot \left[A \cdot \left(C^2 - D \cdot C + {N_u}^2\right) + D \cdot N_u \cdot (A - B)\right]^2}} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 1.12096$ $N_2 := 2.50603$ $N_3 := .94166$

$N_4 := 1.57855$ $N_5 := 1.82093$ $N_6 := 2.11150$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{E \cdot N_u^{\,2} \cdot \left[C \cdot (A - B) + A \cdot N_u\right]}{F \cdot \left[A \cdot D \cdot \left(C^2 + N_u^{\,2}\right)\right]} = 1.365198$$

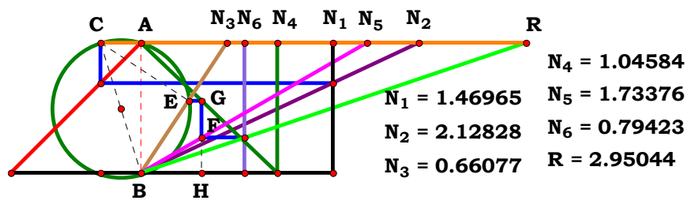
$$Num := \frac{E \cdot N_u^{\,2} \cdot \left[C \cdot (A - B) + A \cdot N_u\right]}{\sqrt{\left[E \cdot N_u^{\,2} \cdot \left[C \cdot (A - B) + A \cdot N_u\right]\right]^2}}$$

$$Den := \frac{F \cdot \left[A \cdot D \cdot \left(C^2 + N_u^{\,2}\right)\right]}{\sqrt{\left[F \cdot \left[A \cdot D \cdot \left(C^2 + N_u^{\,2}\right)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{E \cdot N_u^{\,2} \cdot \left[A \cdot N_u + C \cdot (A - B)\right] \cdot \sqrt{A^2 \cdot D^2 \cdot F^2 \cdot \left(C^2 + N_u^{\,2}\right)^2}}{A \cdot D \cdot F \cdot \left(C^2 + N_u^{\,2}\right) \cdot \sqrt{E^2 \cdot N_u^{\,4} \cdot \left[A \cdot N_u + C \cdot (A - B)\right]^2}} = 0$$

4RST6B6R15



Unit. $AB := 1$ **Given.** $N_1 := 1.46965$ $N_2 := 2.12828$ $N_3 := .66077$

$N_4 := 1.04584$ $N_5 := 1.73376$ $N_6 := .79423$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$ $E := \frac{N_u}{N_5}$ $F := \frac{N_u}{N_6}$

Descriptions.

$$\frac{A \cdot D \cdot \left(C^2 + N_u{}^2\right)}{A \cdot E \cdot F \cdot N_u + C \cdot E \cdot F \cdot (A - B)} = 2.950417$$

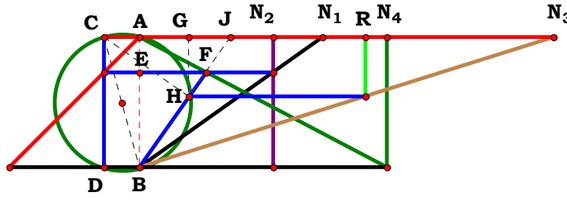
$$Num := \frac{A \cdot D \cdot \left(C^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot D \cdot \left(C^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{A \cdot E \cdot F \cdot N_u + C \cdot E \cdot F \cdot (A - B)}{\sqrt{\left[A \cdot E \cdot F \cdot N_u + C \cdot E \cdot F \cdot (A - B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot D \cdot \left(C^2 + N_u{}^2\right) \cdot \sqrt{\left[A \cdot E \cdot F \cdot N_u + C \cdot E \cdot F \cdot (A - B)\right]^2}}{\left[A \cdot E \cdot F \cdot N_u + C \cdot E \cdot F \cdot (A - B)\right] \cdot \sqrt{A^2 \cdot D^2 \cdot \left(C^2 + N_u{}^2\right)^2}} = 0$$



$N_1 = 1.40185$
$N_2 = 1.02410$
$N_3 = 3.17907$
$N_4 = 1.89818$
$R = 1.73081$

Unit. $AB := 1$ **Given.** $N_1 := 1.40185$ $N_2 := 1.02410$ $N_3 := 3.17907$

$N_4 := 1.89818$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot D \cdot N_u \cdot \left[A \cdot B \cdot \left(D + 2 \cdot N_u\right) - N_u \cdot \left(A^2 + B^2\right)\right]}{B \cdot C \cdot \left[A^2 \cdot \left(D^2 + {N_u}^2\right) - B \cdot {N_u}^2 \cdot (2 \cdot A - B)\right]} = 1.730791$$

$$Num := \frac{A \cdot D \cdot N_u \cdot \left[A \cdot B \cdot \left(D + 2 \cdot N_u\right) - N_u \cdot \left(A^2 + B^2\right)\right]}{\sqrt{\left[A \cdot D \cdot N_u \cdot \left[A \cdot B \cdot \left(D + 2 \cdot N_u\right) - N_u \cdot \left(A^2 + B^2\right)\right]\right]^2}}$$

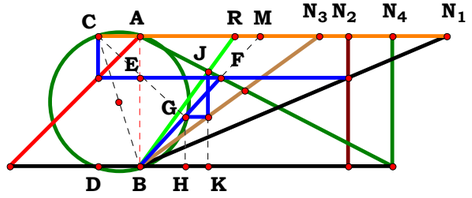
$$Den := \frac{B \cdot C \cdot \left[A^2 \cdot \left(D^2 + {N_u}^2\right) - B \cdot {N_u}^2 \cdot (2 \cdot A - B)\right]}{\sqrt{\left[B \cdot C \cdot \left[A^2 \cdot \left(D^2 + {N_u}^2\right) - B \cdot {N_u}^2 \cdot (2 \cdot A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot D \cdot N_u \cdot \left[A \cdot B \cdot \left(D + 2 \cdot N_u\right) - N_u \cdot \left(A^2 + B^2\right)\right] \cdot \sqrt{B^2 \cdot C^2 \cdot \left[A^2 \cdot \left(D^2 + {N_u}^2\right) + B \cdot {N_u}^2 \cdot (B - 2 \cdot A)\right]^2}}{B \cdot C \cdot \left[A^2 \cdot \left(D^2 + {N_u}^2\right) + B \cdot {N_u}^2 \cdot (B - 2 \cdot A)\right] \cdot \sqrt{A^2 \cdot D^2 \cdot {N_u}^2 \cdot \left[A \cdot B \cdot \left(D + 2 \cdot N_u\right) - N_u \cdot \left(A^2 + B^2\right)\right]^2}} = 0$$

4RST7AB1R1



$N_1 = 2.35105$
$N_2 = 1.59556$
$N_3 = 1.37752$
$N_4 = 1.93693$
$R = 0.72529$

Unit. $AB := 1$ Given. $N_1 := 2.35105$ $N_2 := 1.59556$ $N_3 := 1.37752$

$N_4 := 1.93693$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot D \cdot N_u \cdot \left[A \cdot B \cdot D - N_u \cdot (A - B)^2\right]}{N_u^2 \cdot B \cdot C \cdot (A - B)^2 + N_u \cdot A \cdot D^2 \cdot (A - B)^2 + A^2 \cdot B \cdot D^2 \cdot (C - D)} = 0.725292$$

$$Num := \frac{A \cdot D \cdot N_u \cdot \left[A \cdot B \cdot D - N_u \cdot (A - B)^2\right]}{\sqrt{\left[A \cdot D \cdot N_u \cdot \left[A \cdot B \cdot D - N_u \cdot (A - B)^2\right]\right]^2}}$$

$$Den := \frac{N_u^2 \cdot B \cdot C \cdot (A - B)^2 + N_u \cdot A \cdot D^2 \cdot (A - B)^2 + A^2 \cdot B \cdot D^2 \cdot (C - D)}{\sqrt{\left[N_u^2 \cdot B \cdot C \cdot (A - B)^2 + N_u \cdot A \cdot D^2 \cdot (A - B)^2 + A^2 \cdot B \cdot D^2 \cdot (C - D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot D \cdot N_u \cdot \sqrt{\left[A^2 \cdot B \cdot D^2 \cdot (C - D) + A \cdot D^2 \cdot N_u \cdot (A - B)^2 + B \cdot C \cdot N_u^2 \cdot (A - B)^2\right]^2} \cdot \left[A \cdot B \cdot D - N_u \cdot (A - B)^2\right]}{\left[A^2 \cdot B \cdot D^2 \cdot (C - D) + A \cdot D^2 \cdot N_u \cdot (A - B)^2 + B \cdot C \cdot N_u^2 \cdot (A - B)^2\right] \cdot \sqrt{A^2 \cdot D^2 \cdot N_u^2 \cdot \left[A \cdot B \cdot D - N_u \cdot (A - B)^2\right]^2}} = 0$$

4RST7AB1R2

Unit.

$AB := 1$

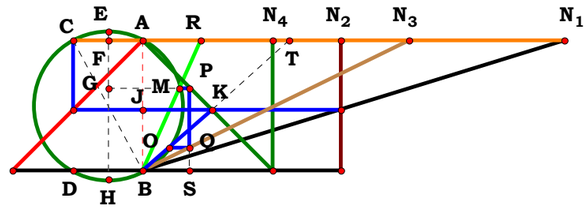
Given.

$N_1 := 3.23246$

$N_2 := 1.51808$

$N_3 := 2.04584$

$N_4 := .99741$



$N_1 = 3.23246$

$N_2 = 1.51808$

$N_3 = 2.04584$

$N_4 = 0.99741$

$R = 0.44685$

Descriptions.

$AC := \frac{N_1 - N_2}{N_1}$ $AJ := \frac{N_1 - N_2}{N_1}$

$JK := N_4 \cdot AJ$ $AT := \frac{JK}{AB - AJ}$

$EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $BT := \sqrt{AB^2 + AT^2}$

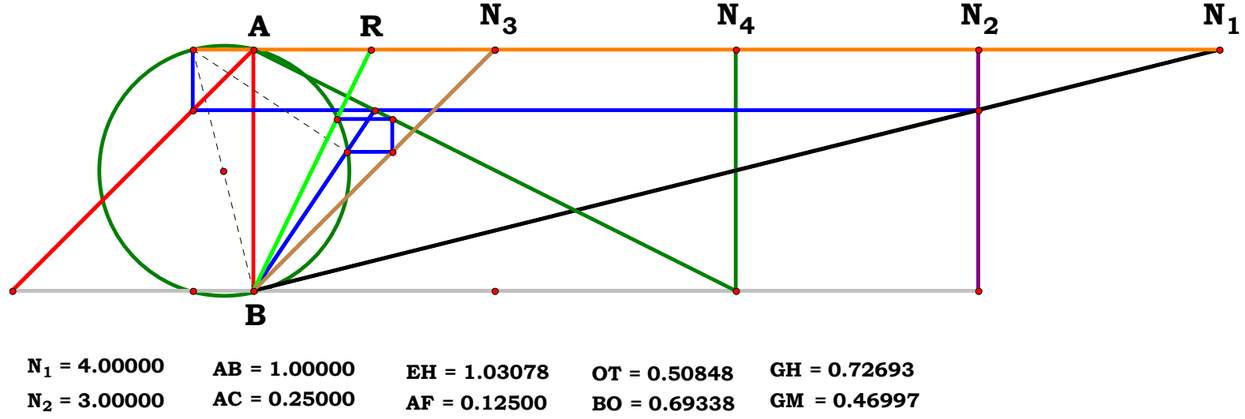
$CT := AT + AC$ $OT := \frac{CT \cdot AT}{BT}$

$BO := BT - OT$ $OS := \frac{BO}{BT}$

$BS := N_3 \cdot OS$ $PS := \frac{N_4 - BS}{N_4}$

$GH := PS + EF$ $GM := \sqrt{GH \cdot (EH - GH)}$

$R := \frac{GM - AF}{PS}$ $R = 0.446856$



$N_1 = 4.00000$ $AB = 1.00000$ $EH = 1.03078$ $OT = 0.50848$ $GH = 0.72693$

$N_2 = 3.00000$ $AC = 0.25000$ $AF = 0.12500$ $BO = 0.69338$ $GM = 0.46997$

$N_3 = 1.00000$ $AJ = 0.25000$ $EF = 0.01539$ $OS = 0.57692$ $R - \frac{GM - AF}{PS} = 0.00000$

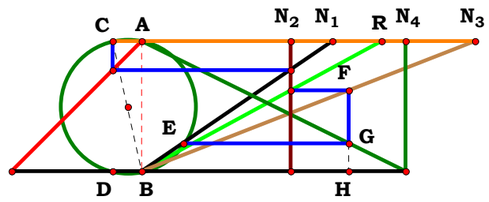
$N_4 = 2.00000$ $JK = 0.50000$ $BT = 1.20185$ $BS = 0.57692$

$R = 0.48483$ $AT = 0.66667$ $CT = 0.91667$ $PS = 0.71154$

Definitions.

$$R - \frac{N_4 \cdot \left[\begin{array}{l} \sqrt{N_4^6 \cdot (N_1 - N_2)^6 - 4 \cdot N_1^2 \cdot N_2^4 \cdot N_3^2 + N_2^2 \cdot N_4^2 \cdot (N_1 - N_2)^2 \cdot \left[4 \cdot N_2 \cdot N_3 \cdot (2 \cdot N_1 \cdot N_3 - N_1 - N_2 \cdot N_3) - 4 \cdot N_1^2 \cdot N_3 \cdot (N_3 - N_4) + N_2^2 \right]} \ \ldots \ \ldots \\ + 2 \cdot N_2 \cdot N_4^4 \cdot (N_2 - 2 \cdot N_1 \cdot N_3) \cdot (N_1 - N_2)^4 + 4 \cdot N_1 \cdot N_2^3 \cdot N_3 \cdot N_4 \cdot (2 \cdot N_1^2 \cdot N_3 + 2 \cdot N_2^2 \cdot N_3 + N_1 \cdot N_2 - 4 \cdot N_1 \cdot N_2 \cdot N_3) \\ + -\sqrt{N_4^2 \cdot (N_1^2 \cdot N_4^2 - 2 \cdot N_1 \cdot N_2 \cdot N_4^2 + N_2^2 \cdot N_4^2 + N_2^2)^2} \cdot (N_1 - N_2) \end{array} \right] \cdot \left[N_4^2 \cdot (N_1 - N_2)^2 + N_2^2 \right]}{2 \cdot \sqrt{N_4^2 \cdot \left[N_1 \cdot N_4^2 \cdot (N_1 - 2 \cdot N_2) + N_2^2 \cdot (N_4^2 + 1) \right]^2} \cdot \left[N_1 \cdot (N_1^2 \cdot N_4^3 + N_2^2 \cdot N_4 - N_3 \cdot N_2^2) + N_2^2 \cdot N_4 \cdot (N_1 \cdot N_4^2 + N_2 \cdot N_3) + N_1 \cdot N_2 \cdot N_4 \cdot (N_1 \cdot N_3 - 2 \cdot N_2 \cdot N_3 - 2 \cdot N_1 \cdot N_4^2) \right]} = 0$$

4RST7B1R3



$N_1 = 1.45996$
$N_2 = 1.14033$
$N_3 = 2.55918$
$N_4 = 2.02410$
$R = 1.84199$

Unit. $AB := 1$ Given. $N_1 := 1.45996$ $N_2 := 1.14033$ $N_3 := 2.55918$

$N_4 := 2.0241$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

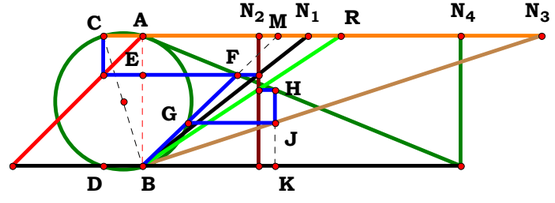
$$\frac{D\cdot\left(A^2+N_u{}^2\right)}{B\cdot C\cdot A - C\cdot A^2 + B\cdot C\cdot N_u} = 1.841985$$

$$Num := \frac{D\cdot\left(A^2+N_u{}^2\right)}{\sqrt{\left[D\cdot\left(A^2+N_u{}^2\right)\right]^2}}$$

$$Den := \frac{B\cdot C\cdot A - C\cdot A^2 + B\cdot C\cdot N_u}{\sqrt{\left(B\cdot C\cdot A - C\cdot A^2 + B\cdot C\cdot N_u\right)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D\cdot\sqrt{\left(B\cdot C\cdot A - C\cdot A^2 + B\cdot C\cdot N_u\right)^2}\cdot\left(A^2+N_u{}^2\right)}{\sqrt{D^2\cdot\left(A^2+N_u{}^2\right)^2}\cdot\left(B\cdot C\cdot A - C\cdot A^2 + B\cdot C\cdot N_u\right)} = 0$$



$N_1 = 1.26624$
$N_2 = 0.88850$
$N_3 = 3.06284$
$N_4 = 2.44059$
$R = 1.52469$

Unit. $AB := 1$ Given. $N_1 := 1.26624$ $N_2 := .88850$ $N_3 := 3.06284$

$N_4 := 2.44059$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^3 \cdot C \cdot (A-B)^2 + A^2 \cdot C \cdot D^2 \cdot N_u}{N_u^2 \cdot B \cdot C \cdot (A-B)^2 + N_u \cdot A \cdot D^2 \cdot (A-B)^2 + A^2 \cdot B \cdot D^2 \cdot (C-D)} = 1.524717$$

$$Num := \frac{N_u^3 \cdot C \cdot (A-B)^2 + A^2 \cdot C \cdot D^2 \cdot N_u}{\sqrt{\left[N_u^3 \cdot C \cdot (A-B)^2 + A^2 \cdot C \cdot D^2 \cdot N_u\right]^2}}$$

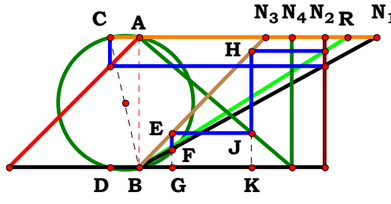
$$Den := \frac{N_u^2 \cdot B \cdot C \cdot (A-B)^2 + N_u \cdot A \cdot D^2 \cdot (A-B)^2 + A^2 \cdot B \cdot D^2 \cdot (C-D)}{\sqrt{\left[N_u^2 \cdot B \cdot C \cdot (A-B)^2 + N_u \cdot A \cdot D^2 \cdot (A-B)^2 + A^2 \cdot B \cdot D^2 \cdot (C-D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left[A^2 \cdot B \cdot D^2 \cdot (C-D) + A \cdot D^2 \cdot N_u \cdot (A-B)^2 + B \cdot C \cdot N_u^2 \cdot (A-B)^2\right]^2} \cdot \left[C \cdot N_u^3 \cdot (A-B)^2 + A^2 \cdot C \cdot D^2 \cdot N_u\right]}{\sqrt{\left[C \cdot N_u^3 \cdot (A-B)^2 + A^2 \cdot C \cdot D^2 \cdot N_u\right]^2} \cdot \left[A^2 \cdot B \cdot D^2 \cdot (C-D) + A \cdot D^2 \cdot N_u \cdot (A-B)^2 + B \cdot C \cdot N_u^2 \cdot (A-B)^2\right]} = 0$$

4RST7B1R5



$N_1 = 1.81833$
$N_2 = 1.42122$
$N_3 = 0.97071$
$N_4 = 1.17175$
$R = 1.59589$

Unit. $AB := 1$ Given. $N_1 := 1.81833$ $N_2 := 1.42122$ $N_3 := .97071$ $N_4 := 1.17175$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{D \cdot N_u \cdot \left(A^2 + N_u{}^2\right)}{B \cdot C \cdot N_u{}^2 - N_u \cdot C^2 \cdot (A - B) + A \cdot B \cdot C \cdot (A - C)} = 1.595902$$

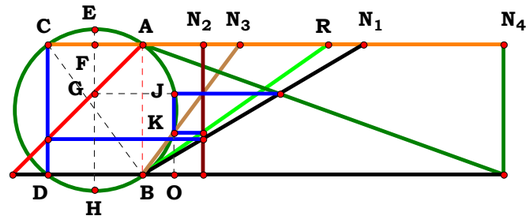
$$Num := \frac{D \cdot N_u \cdot \left(A^2 + N_u{}^2\right)}{\sqrt{\left[D \cdot N_u \cdot \left(A^2 + N_u{}^2\right)\right]^2}}$$

$$Den := \frac{B \cdot C \cdot N_u{}^2 - N_u \cdot C^2 \cdot (A - B) + A \cdot B \cdot C \cdot (A - C)}{\sqrt{\left[B \cdot C \cdot N_u{}^2 - N_u \cdot C^2 \cdot (A - B) + A \cdot B \cdot C \cdot (A - C)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot N_u \cdot \left(A^2 + N_u{}^2\right) \cdot \sqrt{\left[B \cdot C \cdot N_u{}^2 - C^2 \cdot N_u \cdot (A - B) + A \cdot B \cdot C \cdot (A - C)\right]^2}}{\left[B \cdot C \cdot N_u{}^2 - C^2 \cdot N_u \cdot (A - B) + A \cdot B \cdot C \cdot (A - C)\right] \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot \left(A^2 + N_u{}^2\right)^2}} = 0$$



$N_1 = 1.69242$
$N_2 = 0.46232$
$N_3 = 0.74794$
$N_4 = 2.77486$
$R = 1.42468$

Unit. $AB := 1$ **Given.** $N_1 := 1.69242$ $N_2 := .46232$ $N_3 := .74794$

$N_4 := 2.77486$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2 \cdot N_u^2 \cdot (A + D)}{C \cdot \left[A^2 - A \cdot B + A \cdot D - B \cdot D + \sqrt{\left(A^2 + D^2\right) \cdot (A - B)^2 + 2 \cdot A \cdot D \cdot \left(A^2 - 2 \cdot A \cdot B + 3 \cdot B^2\right)}\right]} = 1.424669$$

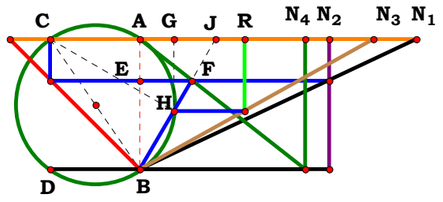
$$Num := \frac{2 \cdot N_u^2 \cdot (A + D)}{\sqrt{\left[2 \cdot N_u^2 \cdot (A + D)\right]^2}}$$

$$Den := \frac{C \cdot \left[A^2 - A \cdot B + A \cdot D - B \cdot D + \sqrt{\left(A^2 + D^2\right) \cdot (A - B)^2 + 2 \cdot A \cdot D \cdot \left(A^2 - 2 \cdot A \cdot B + 3 \cdot B^2\right)}\right]}{\sqrt{\left[C \cdot \left[A^2 - A \cdot B + A \cdot D - B \cdot D + \sqrt{\left(A^2 + D^2\right) \cdot (A - B)^2 + 2 \cdot A \cdot D \cdot \left(A^2 - 2 \cdot A \cdot B + 3 \cdot B^2\right)}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot (A + D) \cdot \sqrt{C^2 \cdot \left[A^2 - A \cdot B + A \cdot D - B \cdot D + \sqrt{\left(A^2 + D^2\right) \cdot (A - B)^2 + 2 \cdot A \cdot D \cdot \left(A^2 - 2 \cdot A \cdot B + 3 \cdot B^2\right)}\right]^2}}{C \cdot \sqrt{N_u^4 \cdot (A + D)^2} \cdot \left[A^2 - A \cdot B + A \cdot D - B \cdot D + \sqrt{\left(A^2 + D^2\right) \cdot (A - B)^2 + 2 \cdot A \cdot D \cdot \left(A^2 - 2 \cdot A \cdot B + 3 \cdot B^2\right)}\right]} = 0$$



$N_1 = 2.11859$
$N_2 = 1.45027$
$N_3 = 1.79401$
$N_4 = 1.26861$
$R = 0.80198$

Unit. $AB := 1$ Given. $N_1 := 2.11859$ $N_2 := 1.45027$ $N_3 := 1.79401$

$N_4 := 1.26861$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A^2 \cdot D \cdot N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right]}{{N_u}^2 \cdot B \cdot C \cdot (A - B)^2 + A^2 \cdot B \cdot C \cdot D^2} = 0.801978$$

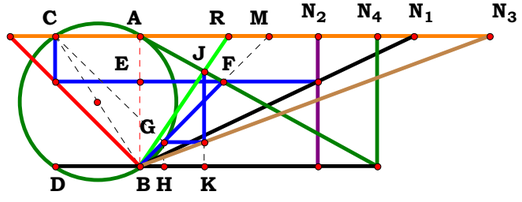
$$Num := \frac{A^2 \cdot D \cdot N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right]}{\sqrt{\left[A^2 \cdot D \cdot N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right]\right]^2}}$$

$$Den := \frac{{N_u}^2 \cdot B \cdot C \cdot (A - B)^2 + A^2 \cdot B \cdot C \cdot D^2}{\sqrt{\left[{N_u}^2 \cdot B \cdot C \cdot (A - B)^2 + A^2 \cdot B \cdot C \cdot D^2\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^2 \cdot D \cdot N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right] \cdot \sqrt{\left[B \cdot C \cdot {N_u}^2 \cdot (A - B)^2 + A^2 \cdot B \cdot C \cdot D^2\right]^2}}{\left[B \cdot C \cdot {N_u}^2 \cdot (A - B)^2 + A^2 \cdot B \cdot C \cdot D^2\right] \cdot \sqrt{A^4 \cdot D^2 \cdot {N_u}^2 \cdot \left[B \cdot D + N_u \cdot (A - B)\right]^2}} = 0$$

4RST7B2R1



$N_1 = 2.09922$
$N_2 = 1.36310$
$N_3 = 2.68510$
$N_4 = 1.82070$
$R = 0.67719$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.36310$ $N_3 := 2.68510$

$N_4 := 1.82070$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A^2 \cdot D \cdot N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right]}{{N_u}^2 \cdot B \cdot C \cdot (A - B)^2 - N_u \cdot A^2 \cdot D^2 \cdot (A - B) + A^2 \cdot B \cdot D^2 \cdot (C - D)} = 0.677186$$

$$Num := \frac{A^2 \cdot D \cdot N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right]}{\sqrt{\left[A^2 \cdot D \cdot N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right]\right]^2}}$$

$$Den := \frac{{N_u}^2 \cdot B \cdot C \cdot (A - B)^2 - N_u \cdot A^2 \cdot D^2 \cdot (A - B) + A^2 \cdot B \cdot D^2 \cdot (C - D)}{\sqrt{\left[{N_u}^2 \cdot B \cdot C \cdot (A - B)^2 - N_u \cdot A^2 \cdot D^2 \cdot (A - B) + A^2 \cdot B \cdot D^2 \cdot (C - D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^2 \cdot D \cdot N_u \cdot \left[B \cdot D + N_u \cdot (A - B)\right] \cdot \sqrt{\left[A^2 \cdot B \cdot D^2 \cdot (C - D) + B \cdot C \cdot {N_u}^2 \cdot (A - B)^2 - A^2 \cdot D^2 \cdot N_u \cdot (A - B)\right]^2}}{\left[A^2 \cdot B \cdot D^2 \cdot (C - D) + B \cdot C \cdot {N_u}^2 \cdot (A - B)^2 - A^2 \cdot D^2 \cdot N_u \cdot (A - B)\right] \cdot \sqrt{A^4 \cdot D^2 \cdot {N_u}^2 \cdot \left[B \cdot D + N_u \cdot (A - B)\right]^2}} = 0$$

4RST7AB2R2

Unit.

$AB := 1$

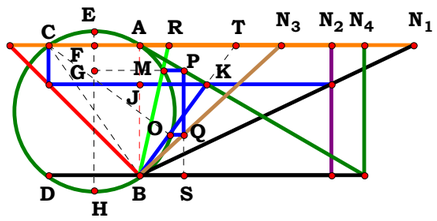
Given.

$N_1 := 2.09922$

$N_2 := 1.46965$

$N_3 := 1.08694$

$N_4 := 1.72384$



$N_1 = 2.09922$

$N_2 = 1.46965$

$N_3 = 1.08694$

$N_4 = 1.72384$

$R = 0.22397$

Descriptions.

$AC := \frac{N_2}{N_1}$ $AJ := \frac{N_1 - N_2}{N_1}$

$JK := N_4 \cdot AJ$ $AT := \frac{JK}{AB - AJ}$

$EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $BT := \sqrt{AB^2 + AT^2}$

$CT := AT + AC$ $OT := \frac{CT \cdot AT}{BT}$

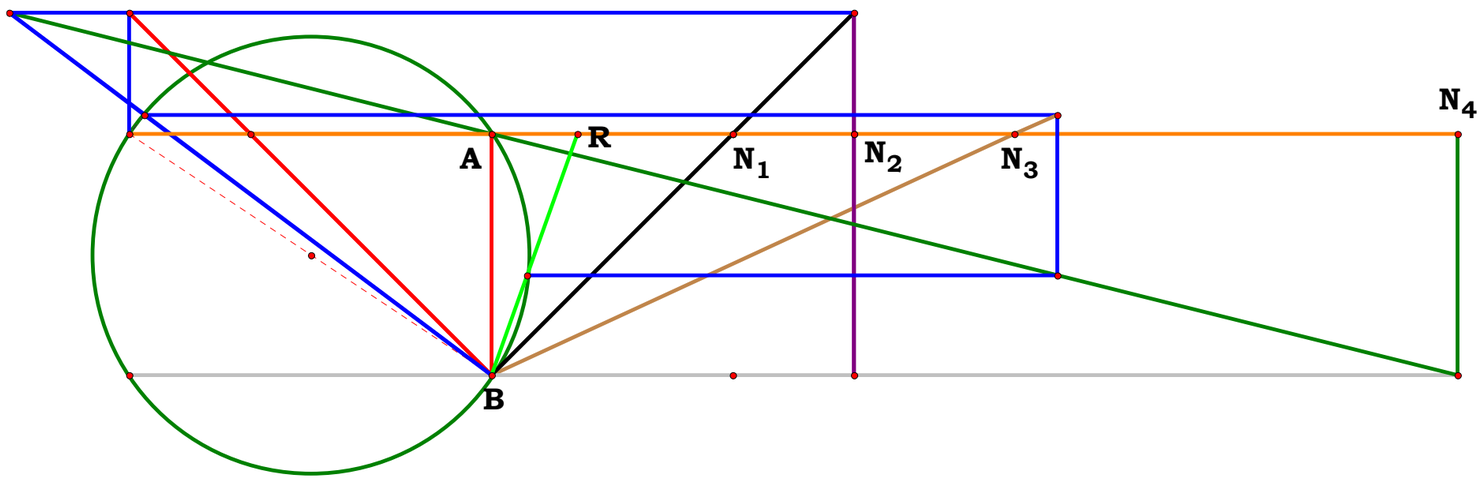
$BO := BT - OT$ $OS := \frac{BO}{BT}$

$BS := N_3 \cdot OS$ $PS := \frac{N_4 - BS}{N_4}$

$GH := PS + EF$ $GM := \sqrt{GH \cdot (EH - GH)}$

$R := \frac{GM - AF}{PS}$ $R = 0.223974$

Definitions.



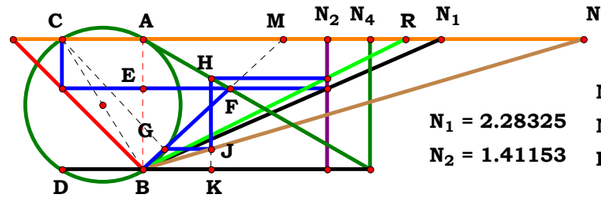
$N_1 = 1.00000$ $AC = 1.50000$ $AT = -1.33333$ $BT = 1.66667$ $OS = 1.08000$ $GM = 0.89735$

$N_2 = 1.50000$ $AJ = -0.50000$ $EH = 1.80278$ $CT = 0.16667$ $BS = 2.34071$ $R - \frac{GM-AF}{PS} = 0.00000$

$N_3 = 2.16733$ $JK = -2.00000$ $AF = 0.75000$ $OT = -0.13333$ $PS = 0.41482$

$N_4 = 4.00000$ $AB = 1.00000$ $EF = 0.40139$ $BO = 1.80000$ $GH = 0.81621$

$R = 0.35522$



$N_1 = 2.28325$
$N_2 = 1.41153$
$N_3 = 3.38247$
$N_4 = 1.74321$
$R = 2.01819$

Unit. $AB := 1$ Given. $N_1 := 2.28325$ $N_2 := 1.41153$ $N_3 := 3.38247$

$N_4 := 1.74321$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{N_u^3 \cdot C \cdot (A-B)^2 + A^2 \cdot C \cdot D^2 \cdot N_u}{N_u^2 \cdot B \cdot C \cdot (A-B)^2 - N_u \cdot A^2 \cdot D^2 \cdot (A-B) + A^2 \cdot B \cdot D^2 \cdot (C-D)} = 2.01819$$

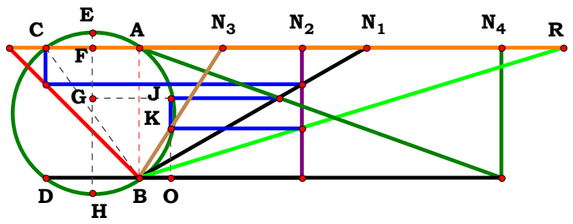
$$Num := \frac{N_u^3 \cdot C \cdot (A-B)^2 + A^2 \cdot C \cdot D^2 \cdot N_u}{\sqrt{\left[N_u^3 \cdot C \cdot (A-B)^2 + A^2 \cdot C \cdot D^2 \cdot N_u\right]^2}}$$

$$Den := \frac{N_u^2 \cdot B \cdot C \cdot (A-B)^2 - N_u \cdot A^2 \cdot D^2 \cdot (A-B) + A^2 \cdot B \cdot D^2 \cdot (C-D)}{\sqrt{\left[N_u^2 \cdot B \cdot C \cdot (A-B)^2 - N_u \cdot A^2 \cdot D^2 \cdot (A-B) + A^2 \cdot B \cdot D^2 \cdot (C-D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left[A^2 \cdot B \cdot D^2 \cdot (C-D) + B \cdot C \cdot N_u^2 \cdot (A-B)^2 - A^2 \cdot D^2 \cdot N_u \cdot (A-B)\right]^2} \cdot \left[C \cdot N_u^3 \cdot (A-B)^2 + A^2 \cdot C \cdot D^2 \cdot N_u\right]}{\sqrt{\left[C \cdot N_u^3 \cdot (A-B)^2 + A^2 \cdot C \cdot D^2 \cdot N_u\right]^2} \cdot \left[A^2 \cdot B \cdot D^2 \cdot (C-D) + B \cdot C \cdot N_u^2 \cdot (A-B)^2 - A^2 \cdot D^2 \cdot N_u \cdot (A-B)\right]} = 0$$



$N_1 = 1.74085$
$N_2 = 1.24687$
$N_3 = 0.64140$
$N_4 = 2.77959$
$R = 3.25003$

Unit. $AB := 1$ **Given.** $N_1 := 1.74085$ $N_2 := 1.24687$ $N_3 := .64140$

$N_4 := 2.77959$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2 \cdot N_u^{\,2} \cdot (A + D)}{\sqrt{A} \cdot C \cdot \left(\sqrt{A^3 + 2 \cdot A^2 \cdot D + A \cdot D^2 + 4 \cdot B^2 \cdot D} - A^{\frac{3}{2}} - \sqrt{A} \cdot D \right)} = 3.250024$$

$$Num := \frac{2 \cdot N_u^{\,2} \cdot (A + D)}{\sqrt{\left[2 \cdot N_u^{\,2} \cdot (A + D) \right]^2}}$$

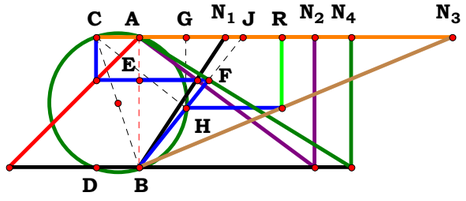
$$Den := \frac{\sqrt{A} \cdot C \cdot \left(\sqrt{A^3 + 2 \cdot A^2 \cdot D + A \cdot D^2 + 4 \cdot B^2 \cdot D} - A^{\frac{3}{2}} - \sqrt{A} \cdot D \right)}{\sqrt{\left[\sqrt{A} \cdot C \cdot \left(\sqrt{A^3 + 2 \cdot A^2 \cdot D + A \cdot D^2 + 4 \cdot B^2 \cdot D} - A^{\frac{3}{2}} - \sqrt{A} \cdot D \right) \right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^{\,2} \cdot (A + D) \cdot \sqrt{A \cdot C^2 \cdot \left(A^{\frac{3}{2}} - \sqrt{A^3 + 2 \cdot A^2 \cdot D + A \cdot D^2 + 4 \cdot B^2 \cdot D} + \sqrt{A} \cdot D \right)^2}}{\sqrt{A} \cdot C \cdot \sqrt{N_u^{\,4} \cdot (A + D)^2} \cdot \left(\sqrt{A^3 + 2 \cdot A^2 \cdot D + A \cdot D^2 + 4 \cdot B^2 \cdot D} - A^{\frac{3}{2}} - \sqrt{A} \cdot D \right)} = 0$$

4RST7B3R0



$N_1 = 0.65604$
$N_2 = 1.34373$
$N_3 = 2.40421$
$N_4 = 1.62698$
$R = 1.08997$

Unit. $AB := 1$ Given. $N_1 := .65604$ $N_2 := 1.34373$ $N_3 := 2.40421$

$N_4 := 1.62698$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot D \cdot N_u \cdot \left(D \cdot A^2 + D \cdot A \cdot B - N_u \cdot B^2\right)}{C \cdot (A + B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)} = 1.089977$$

$$Num := \frac{A \cdot D \cdot N_u \cdot \left(D \cdot A^2 + D \cdot A \cdot B - N_u \cdot B^2\right)}{\sqrt{\left[A \cdot D \cdot N_u \cdot \left(D \cdot A^2 + D \cdot A \cdot B - N_u \cdot B^2\right)\right]^2}}$$

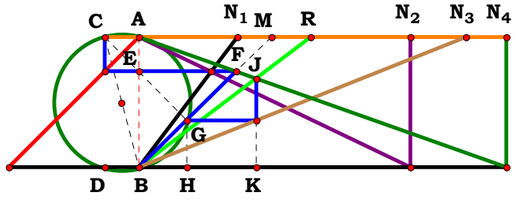
$$Den := \frac{C \cdot (A + B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)}{\sqrt{\left[C \cdot (A + B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot D \cdot N_u \cdot \left(D \cdot A^2 + D \cdot A \cdot B - N_u \cdot B^2\right) \cdot \sqrt{C^2 \cdot (A + B)^2 \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)^2}}{C \cdot (A + B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right) \cdot \sqrt{A^2 \cdot D^2 \cdot {N_u}^2 \cdot \left(D \cdot A^2 + D \cdot A \cdot B - N_u \cdot B^2\right)^2}} = 0$$

4RST7B3R1



$N_1 = 0.75290$
$N_2 = 2.07985$
$N_3 = 2.51075$
$N_4 = 2.81833$
$R = 1.31502$

Unit. $AB := 1$ Given. $N_1 := .75290$ $N_2 := 2.07985$ $N_3 := 2.51075$

$N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot D \cdot N_u \cdot \left(D \cdot A^2 + D \cdot A \cdot B - N_u \cdot B^2\right)}{{N_u}^2 \cdot B^2 \cdot C \cdot (A + B) + A \cdot D^2 \cdot \left[A^2 \cdot (C - D) + B^2 \cdot N_u + A \cdot B \cdot (C - D)\right]} = 1.315017$$

$$Num := \frac{A \cdot D \cdot N_u \cdot \left(D \cdot A^2 + D \cdot A \cdot B - N_u \cdot B^2\right)}{\sqrt{\left[A \cdot D \cdot N_u \cdot \left(D \cdot A^2 + D \cdot A \cdot B - N_u \cdot B^2\right)\right]^2}}$$

$$Den := \frac{{N_u}^2 \cdot B^2 \cdot C \cdot (A + B) + A \cdot D^2 \cdot \left[A^2 \cdot (C - D) + B^2 \cdot N_u + A \cdot B \cdot (C - D)\right]}{\sqrt{\left[{N_u}^2 \cdot B^2 \cdot C \cdot (A + B) + A \cdot D^2 \cdot \left[A^2 \cdot (C - D) + B^2 \cdot N_u + A \cdot B \cdot (C - D)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot D \cdot N_u \cdot \sqrt{\left[A \cdot D^2 \cdot \left[(C - D) \cdot A^2 + (C - D) \cdot A \cdot B + N_u \cdot B^2\right] + B^2 \cdot C \cdot {N_u}^2 \cdot (A + B)\right]^2} \cdot \left(D \cdot A^2 + D \cdot A \cdot B - N_u \cdot B^2\right)}{\left[A \cdot D^2 \cdot \left[(C - D) \cdot A^2 + (C - D) \cdot A \cdot B + N_u \cdot B^2\right] + B^2 \cdot C \cdot {N_u}^2 \cdot (A + B)\right] \cdot \sqrt{A^2 \cdot D^2 \cdot {N_u}^2 \cdot \left(D \cdot A^2 + D \cdot A \cdot B - N_u \cdot B^2\right)^2}} = 0$$

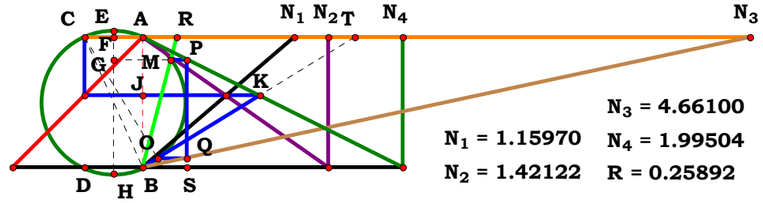
4RST7AB3R2

Unit.

$AB := 1$

Given.

$N_1 := 1.15970$ $N_2 := 1.42122$ $N_3 := 4.66100$ $N_4 := 1.99504$



Descriptions.

$AC := \frac{N_1}{N_1 + N_2}$ $AJ := \frac{N_1}{N_1 + N_2}$

$JK := N_4 \cdot AJ$ $AT := \frac{JK}{AB - AJ}$

$EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $BT := \sqrt{AB^2 + AT^2}$

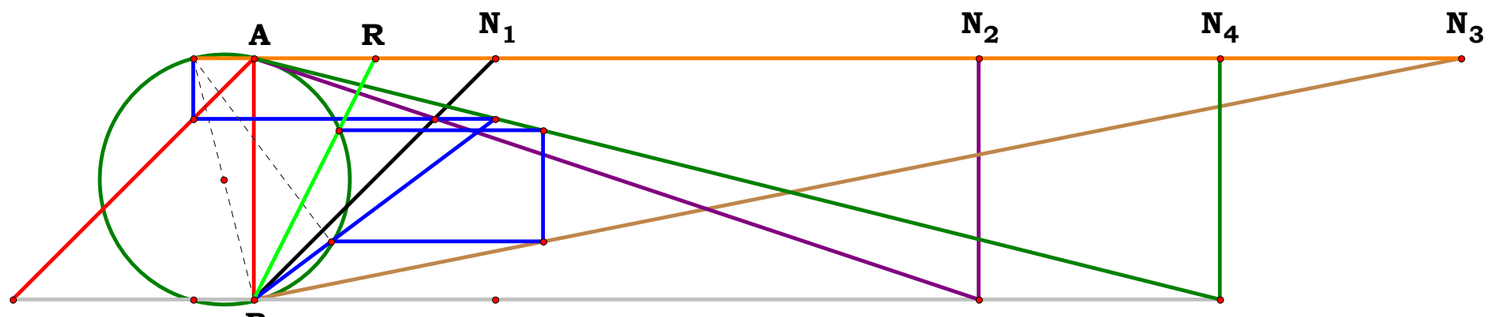
$CT := AT + AC$ $OT := \frac{CT \cdot AT}{BT}$

$BO := BT - OT$ $OS := \frac{BO}{BT}$

$BS := N_3 \cdot OS$ $PS := \frac{N_4 - BS}{N_4}$

$GH := PS + EF$ $GM := \sqrt{GH \cdot (EH - GH)}$

$R := \frac{GM - AF}{PS}$ $R = 0.258922$



$N_1 = 1.00000$ $N_4 = 4.00000$

$N_2 = 3.00000$ $R = 0.50000$

$N_3 = 5.00000$

$AB = 1.00000$ $AT = 1.33333$ $BT = 1.66667$ $OS = 0.24000$

$AC = 0.25000$ $EH = 1.03078$ $CT = 1.58333$ $BS = 1.20000$

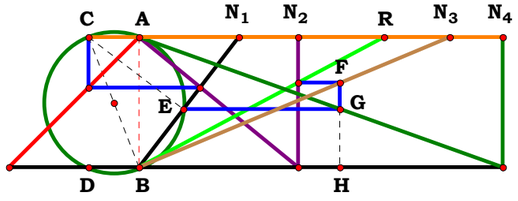
$AJ = 0.25000$ $AF = 0.12500$ $OT = 1.26667$ $PS = 0.70000$

$JK = 1.00000$ $EF = 0.01539$ $BO = 0.40000$ $GH = 0.71539$

$GM = 0.47500$

$R - \frac{GM - AF}{PS} = 0.00000$

Definitions.



$N_1 = 0.76258$
$N_2 = 1.21782$
$N_3 = 2.38484$
$N_4 = 2.78928$
$R = 1.88161$

Unit. $AB := 1$ **Given.** $N_1 := .76258$ $N_2 := 1.21782$ $N_3 := 2.38484$

$N_4 := 2.78928$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{D\cdot\left(A^2+N_u{}^2\right)\cdot(A+B)}{B\cdot C\cdot\left[A\cdot B+N_u\cdot(A+B)\right]}=1.881632$$

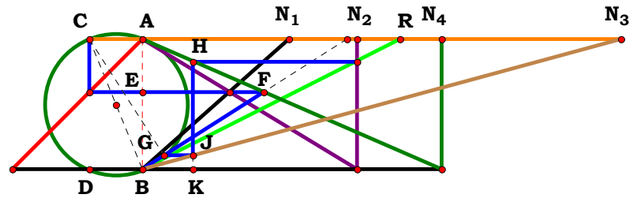
$$Num := \frac{D\cdot\left(A^2+N_u{}^2\right)\cdot(A+B)}{\sqrt{\left[D\cdot\left(A^2+N_u{}^2\right)\cdot(A+B)\right]^2}}$$

$$Den := \frac{B\cdot C\cdot\left[A\cdot B+N_u\cdot(A+B)\right]}{\sqrt{\left[B\cdot C\cdot\left[A\cdot B+N_u\cdot(A+B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{D\cdot\left(A^2+N_u{}^2\right)\cdot(A+B)\cdot\sqrt{B^2\cdot C^2\cdot\left[N_u\cdot(A+B)+A\cdot B\right]^2}}{B\cdot C\cdot\left[N_u\cdot(A+B)+A\cdot B\right]\cdot\sqrt{D^2\cdot\left(A^2+N_u{}^2\right)^2\cdot(A+B)^2}}=0$$



$N_1 = 1.12096$
$N_2 = 1.64399$
$N_3 = 3.67305$
$N_4 = 2.29530$
$R = 1.97967$

Unit. $AB := 1$ Given. $N_1 := 1.12096$ $N_2 := 1.64399$ $N_3 := 3.67305$

$N_4 := 2.29530$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{C \cdot N_u \cdot (A+B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot N_u{}^2\right)}{B^3 \cdot C \cdot N_u{}^2 \cdot (A+B) + A \cdot B \cdot D^2 \cdot \left[A^2 \cdot (C-D) + B^2 \cdot N_u + A \cdot B \cdot (C-D)\right]} = 1.979665$$

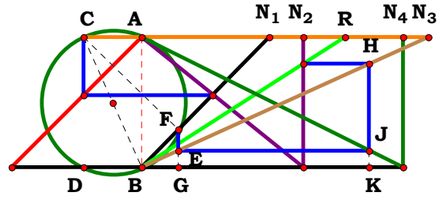
$$Num := \frac{C \cdot N_u \cdot (A+B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot N_u{}^2\right)}{\sqrt{\left[C \cdot N_u \cdot (A+B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot N_u{}^2\right)\right]^2}}$$

$$Den := \frac{B^3 \cdot C \cdot N_u{}^2 \cdot (A+B) + A \cdot B \cdot D^2 \cdot \left[A^2 \cdot (C-D) + B^2 \cdot N_u + A \cdot B \cdot (C-D)\right]}{\sqrt{\left[B^3 \cdot C \cdot N_u{}^2 \cdot (A+B) + A \cdot B \cdot D^2 \cdot \left[A^2 \cdot (C-D) + B^2 \cdot N_u + A \cdot B \cdot (C-D)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot N_u \cdot \sqrt{\left[B^3 \cdot C \cdot N_u{}^2 \cdot (A+B) + A \cdot B \cdot D^2 \cdot \left[(C-D) \cdot A^2 + (C-D) \cdot A \cdot B + N_u \cdot B^2\right]\right]^2} \cdot (A+B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot N_u{}^2\right)}{\left[B^3 \cdot C \cdot N_u{}^2 \cdot (A+B) + A \cdot B \cdot D^2 \cdot \left[(C-D) \cdot A^2 + (C-D) \cdot A \cdot B + N_u \cdot B^2\right]\right] \cdot \sqrt{C^2 \cdot N_u{}^2 \cdot (A+B)^2 \cdot \left(A^2 \cdot D^2 + B^2 \cdot N_u{}^2\right)^2}} = 0$$



$N_1 = 0.97567$
$N_2 = 1.23719$
$N_3 = 2.20081$
$N_4 = 2.00473$
$R = 1.56010$

Unit. $AB := 1$ Given. $N_1 := .97567$ $N_2 := 1.23719$ $N_3 := 2.20081$

$N_4 := 2.00473$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{D \cdot N_u \cdot \left(A^2 + N_u{}^2\right) \cdot (A + B)}{B \cdot C \cdot \left[(A + B) \cdot N_u{}^2 + B \cdot C \cdot N_u + A \cdot (A - C) \cdot (A + B)\right]} = 1.560102$$

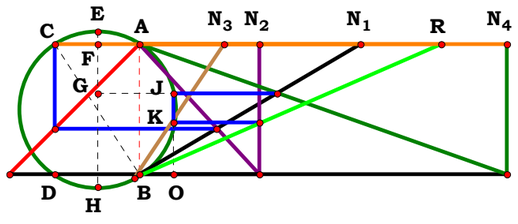
$$Num := \frac{D \cdot N_u \cdot \left(A^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[D \cdot N_u \cdot \left(A^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

$$Den := \frac{B \cdot C \cdot \left[(A + B) \cdot N_u{}^2 + B \cdot C \cdot N_u + A \cdot (A - C) \cdot (A + B)\right]}{\sqrt{\left[B \cdot C \cdot \left[(A + B) \cdot N_u{}^2 + B \cdot C \cdot N_u + A \cdot (A - C) \cdot (A + B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot N_u \cdot \left(A^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{B^2 \cdot C^2 \cdot \left[(A + B) \cdot N_u{}^2 + B \cdot C \cdot N_u + A \cdot (A + B) \cdot (A - C)\right]^2}}{B \cdot C \cdot \left[(A + B) \cdot N_u{}^2 + B \cdot C \cdot N_u + A \cdot (A + B) \cdot (A - C)\right] \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot \left(A^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$



$N_1 = 1.69242$
$N_2 = 0.91756$
$N_3 = 0.65108$
$N_4 = 2.81833$
$R = 2.31120$

Unit. $AB := 1$ **Given.** $N_1 := 1.69242$ $N_2 := .91756$ $N_3 := .65108$ $N_4 := 2.81833$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2 \cdot N_u^2 \cdot (A+B) \cdot (A+D)}{B \cdot C \cdot \left[\sqrt{4 \cdot A^3 \cdot D + A^2 \cdot B^2 + 8 \cdot A^2 \cdot B \cdot D + 6 \cdot A \cdot B^2 \cdot D + B^2 \cdot D^2} - B \cdot (A+D)\right]} = 2.3112$$

$$Num := \frac{2 \cdot N_u^2 \cdot (A+B) \cdot (A+D)}{\sqrt{\left[2 \cdot N_u^2 \cdot (A+B) \cdot (A+D)\right]^2}}$$

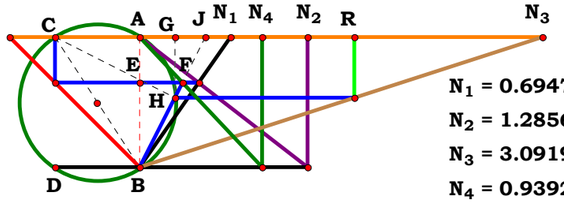
$$Den := \frac{B \cdot C \cdot \left[\sqrt{4 \cdot A^3 \cdot D + A^2 \cdot B^2 + 8 \cdot A^2 \cdot B \cdot D + 6 \cdot A \cdot B^2 \cdot D + B^2 \cdot D^2} - B \cdot (A+D)\right]}{\sqrt{\left[B \cdot C \cdot \left[\sqrt{4 \cdot A^3 \cdot D + A^2 \cdot B^2 + 8 \cdot A^2 \cdot B \cdot D + 6 \cdot A \cdot B^2 \cdot D + B^2 \cdot D^2} - B \cdot (A+D)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot (A+B) \cdot (A+D) \cdot \sqrt{B^2 \cdot C^2 \cdot \left[\sqrt{4 \cdot A^3 \cdot D + A^2 \cdot B^2 + 8 \cdot A^2 \cdot B \cdot D + 6 \cdot A \cdot B^2 \cdot D + B^2 \cdot D^2} - B \cdot (A+D)\right]^2}}{B \cdot C \cdot \left[\sqrt{4 \cdot A^3 \cdot D + A^2 \cdot B^2 + 8 \cdot A^2 \cdot B \cdot D + 6 \cdot A \cdot B^2 \cdot D + B^2 \cdot D^2} - B \cdot (A+D)\right] \cdot \sqrt{N_u^4 \cdot (A+B)^2 \cdot (A+D)^2}} = 0$$

4RST7B4R0



$N_1 = 0.69478$
$N_2 = 1.28562$
$N_3 = 3.09190$
$N_4 = 0.93929$
$R = 1.64829$

Unit. $AB := 1$ Given. $N_1 := .69478$ $N_2 := 1.28562$ $N_3 := 3.09190$

$N_4 := .93929$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A^2 \cdot D \cdot N_u \cdot \left[D \cdot (A + B) - B \cdot N_u\right]}{C \cdot (A + B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)} = 1.648305$$

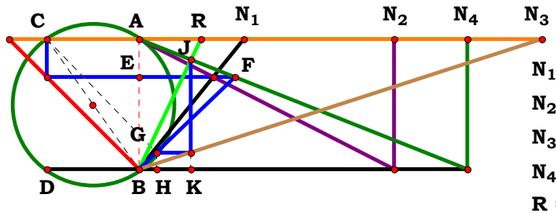
$$Num := \frac{A^2 \cdot D \cdot N_u \cdot \left[D \cdot (A + B) - B \cdot N_u\right]}{\sqrt{\left[A^2 \cdot D \cdot N_u \cdot \left[D \cdot (A + B) - B \cdot N_u\right]\right]^2}}$$

$$Den := \frac{C \cdot (A + B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)}{\sqrt{\left[C \cdot (A + B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^2 \cdot D \cdot N_u \cdot \left[D \cdot (A + B) - B \cdot N_u\right] \cdot \sqrt{C^2 \cdot (A + B)^2 \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)^2}}{C \cdot (A + B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right) \cdot \sqrt{A^4 \cdot D^2 \cdot {N_u}^2 \cdot \left[D \cdot (A + B) - B \cdot N_u\right]^2}} = 0$$

4RST7B4R1



$N_1 = 0.80133$
$N_2 = 1.95394$
$N_3 = 3.09190$
$N_4 = 2.51808$
$R = 0.47622$

Unit. $AB := 1$ Given. $N_1 := .80133$ $N_2 := 1.95394$ $N_3 := 3.09190$

$N_4 := 2.51808$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A^2 \cdot D \cdot N_u \cdot \left[D \cdot (A + B) - B \cdot N_u\right]}{{N_u}^2 \cdot B^2 \cdot C \cdot (A + B) + \left[A^3 \cdot D^2 \cdot (C - D) + A^2 \cdot B \cdot D^2 \cdot \left(C - D + N_u\right)\right]} = 0.476209$$

$$Num := \frac{A^2 \cdot D \cdot N_u \cdot \left[D \cdot (A + B) - B \cdot N_u\right]}{\sqrt{\left[A^2 \cdot D \cdot N_u \cdot \left[D \cdot (A + B) - B \cdot N_u\right]\right]^2}}$$

$$Den := \frac{{N_u}^2 \cdot B^2 \cdot C \cdot (A + B) + \left[A^3 \cdot D^2 \cdot (C - D) + A^2 \cdot B \cdot D^2 \cdot \left(C - D + N_u\right)\right]}{\sqrt{\left[{N_u}^2 \cdot B^2 \cdot C \cdot (A + B) + \left[A^3 \cdot D^2 \cdot (C - D) + A^2 \cdot B \cdot D^2 \cdot \left(C - D + N_u\right)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A^2 \cdot D \cdot N_u \cdot \left[D \cdot (A + B) - B \cdot N_u\right] \cdot \sqrt{\left[A^3 \cdot D^2 \cdot (C - D) + A^2 \cdot B \cdot D^2 \cdot \left(C - D + N_u\right) + B^2 \cdot C \cdot {N_u}^2 \cdot (A + B)\right]^2}}{\left[A^3 \cdot D^2 \cdot (C - D) + A^2 \cdot B \cdot D^2 \cdot \left(C - D + N_u\right) + B^2 \cdot C \cdot {N_u}^2 \cdot (A + B)\right] \cdot \sqrt{A^4 \cdot D^2 \cdot {N_u}^2 \cdot \left[D \cdot (A + B) - B \cdot N_u\right]^2}} = 0$$

4RST7AB4R2

Unit.

$AB := 1$

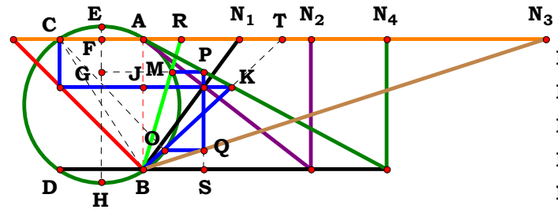
Given.

$N_1 := .73353$

$N_2 := 1.28562$

$N_3 := 3.09190$

$N_4 := 1.86913$



$N_1 = 0.73353$

$N_2 = 1.28562$

$N_3 = 3.09190$

$N_4 = 1.86913$

$R = 0.29052$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $AJ := \frac{N_1}{N_1 + N_2}$

$JK := N_4 \cdot AJ$ $AT := \frac{JK}{AB - AJ}$

$EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $BT := \sqrt{AB^2 + AT^2}$

$CT := AT + AC$ $OT := \frac{CT \cdot AT}{BT}$

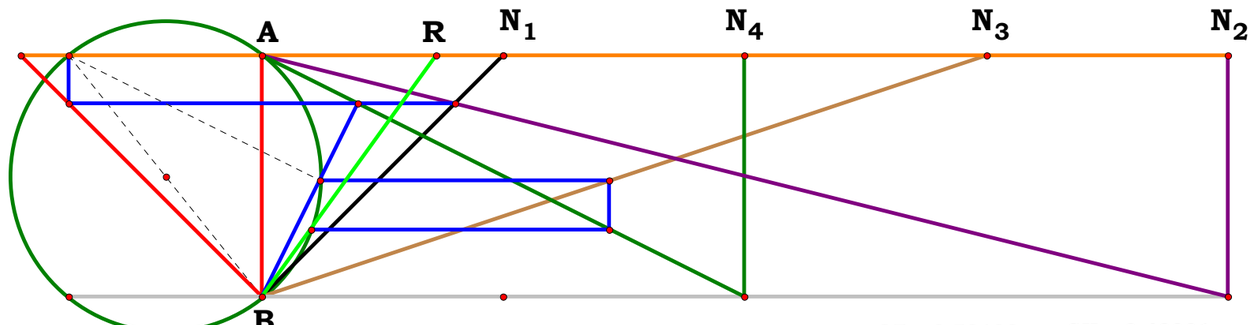
$BO := BT - OT$ $OS := \frac{BO}{BT}$

$BS := N_3 \cdot OS$ $PS := \frac{N_4 - BS}{N_4}$

$GH := PS + EF$ $GM := \sqrt{GH \cdot (EH - GH)}$

$R := \frac{GM - AF}{PS}$ $R = 0.290522$

Definitions.



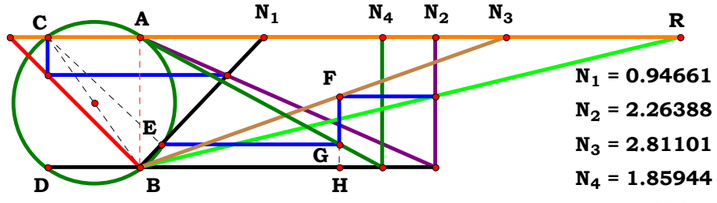
$N_1 = 1.00000$ $AB = 1.00000$ $EH = 1.28062$ $OT = 0.58138$ $GH = 0.42031$

$N_2 = 4.00000$ $AC = 0.80000$ $AF = 0.40000$ $BO = 0.53666$ $GM = 0.60133$

$N_3 = 3.00000$ $AJ = 0.20000$ $EF = 0.14031$ $OS = 0.48000$ $R - \frac{GM - AF}{PS} = 0.00000$

$N_4 = 2.00000$ $JK = 0.40000$ $BT = 1.11803$ $BS = 1.44000$

$R = 0.71904$ $AT = 0.50000$ $CT = 1.30000$ $PS = 0.28000$



Unit. $AB := 1$ Given. $N_1 := .94661$ $N_2 := 2.26388$ $N_3 := 2.81101$

$N_4 := 1.85944$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{D\cdot\left(A^2+{N_u}^2\right)\cdot(A+B)}{B\cdot C\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)}=4.150208$$

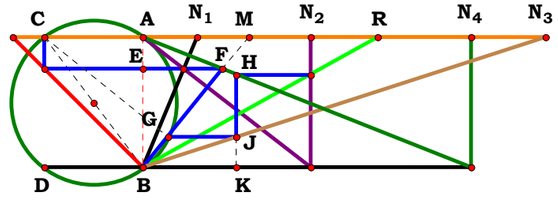
$$Num := \frac{D\cdot\left(A^2+{N_u}^2\right)\cdot(A+B)}{\sqrt{\left[D\cdot\left(A^2+{N_u}^2\right)\cdot(A+B)\right]^2}}$$

$$Den := \frac{B\cdot C\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)}{\sqrt{\left[B\cdot C\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{D\cdot\left(A^2+{N_u}^2\right)\cdot(A+B)\cdot\sqrt{B^2\cdot C^2\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)^2}}{B\cdot C\cdot\sqrt{D^2\cdot\left(A^2+{N_u}^2\right)^2\cdot(A+B)^2}\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)}=0$$



$N_1 = 0.41390$
$N_2 = 1.28562$
$N_3 = 3.09190$
$N_4 = 2.51808$
$R = 1.80200$

Unit. $AB := 1$ Given. $N_1 := .41390$ $N_2 := 1.28562$ $N_3 := 3.09190$

$N_4 := 2.51808$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{C \cdot N_u \cdot (A+B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)}{{N_u}^2 \cdot B^3 \cdot C \cdot (A+B) + A^2 \cdot B^2 \cdot D^2 \cdot N_u + A^2 \cdot B \cdot D^2 \cdot (C-D) \cdot (A+B)} = 1.801987$$

$$Num := \frac{C \cdot N_u \cdot (A+B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)}{\sqrt{\left[C \cdot N_u \cdot (A+B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)\right]^2}}$$

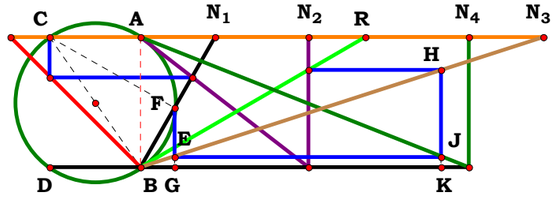
$$Den := \frac{{N_u}^2 \cdot B^3 \cdot C \cdot (A+B) + A^2 \cdot B^2 \cdot D^2 \cdot N_u + A^2 \cdot B \cdot D^2 \cdot (C-D) \cdot (A+B)}{\sqrt{\left[{N_u}^2 \cdot B^3 \cdot C \cdot (A+B) + A^2 \cdot B^2 \cdot D^2 \cdot N_u + A^2 \cdot B \cdot D^2 \cdot (C-D) \cdot (A+B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{C \cdot N_u \cdot \sqrt{\left[A^2 \cdot B^2 \cdot D^2 \cdot N_u + B^3 \cdot C \cdot {N_u}^2 \cdot (A+B) + A^2 \cdot B \cdot D^2 \cdot (A+B) \cdot (C-D)\right]^2} \cdot (A+B) \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)}{\left[A^2 \cdot B^2 \cdot D^2 \cdot N_u + B^3 \cdot C \cdot {N_u}^2 \cdot (A+B) + A^2 \cdot B \cdot D^2 \cdot (A+B) \cdot (C-D)\right] \cdot \sqrt{C^2 \cdot {N_u}^2 \cdot (A+B)^2 \cdot \left(A^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)^2}} = 0$$

4RST7B4R5



$N_1 = 0.56887$
$N_2 = 1.28562$
$N_3 = 3.09190$
$N_4 = 2.51808$
$R = 1.72370$

Unit. $AB := 1$ Given. $N_1 := .56887$ $N_2 := 1.28562$ $N_3 := 3.09190$

$N_4 := 2.51808$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{D \cdot N_u \cdot \left(A^2 + N_u{}^2\right) \cdot (A + B)}{B \cdot C \cdot \left[(A + B) \cdot N_u{}^2 + A \cdot C \cdot N_u + A \cdot (A - C) \cdot (A + B)\right]} = 1.723697$$

$$Num := \frac{D \cdot N_u \cdot \left(A^2 + N_u{}^2\right) \cdot (A + B)}{\sqrt{\left[D \cdot N_u \cdot \left(A^2 + N_u{}^2\right) \cdot (A + B)\right]^2}}$$

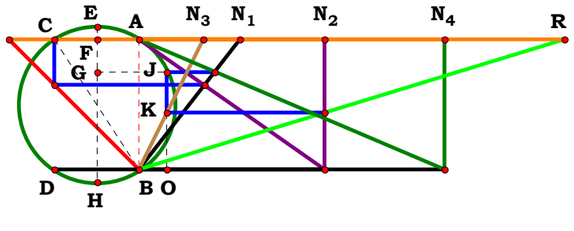
$$Den := \frac{B \cdot C \cdot \left[(A + B) \cdot N_u{}^2 + A \cdot C \cdot N_u + A \cdot (A - C) \cdot (A + B)\right]}{\sqrt{\left[B \cdot C \cdot \left[(A + B) \cdot N_u{}^2 + A \cdot C \cdot N_u + A \cdot (A - C) \cdot (A + B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot N_u \cdot \left(A^2 + N_u{}^2\right) \cdot (A + B) \cdot \sqrt{B^2 \cdot C^2 \cdot \left[(A + B) \cdot N_u{}^2 + A \cdot C \cdot N_u + A \cdot (A + B) \cdot (A - C)\right]^2}}{B \cdot C \cdot \left[(A + B) \cdot N_u{}^2 + A \cdot C \cdot N_u + A \cdot (A + B) \cdot (A - C)\right] \cdot \sqrt{D^2 \cdot N_u{}^2 \cdot \left(A^2 + N_u{}^2\right)^2 \cdot (A + B)^2}} = 0$$

4RST7AB4R6



$N_1 = 0.77227$
$N_2 = 1.42122$
$N_3 = 0.49611$
$N_4 = 2.34373$
$R = 3.26696$

Unit. $AB := 1$ Given. $N_1 := .77227$ $N_2 := 1.42122$ $N_3 := .49611$

$N_4 := 2.34373$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2 \cdot N_u^4 \cdot (A+B) \cdot (A+D)}{\sqrt{A} \cdot B \cdot C \cdot N_u^2 \cdot \left[\sqrt{A^3 + 6 \cdot D \cdot A^2 + A \cdot D \cdot (8 \cdot B + D) + 4 \cdot B^2 \cdot D} - A^{\frac{3}{2}} - \sqrt{A} \cdot D\right]} = 3.266965$$

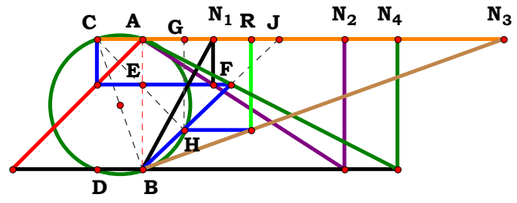
$$Num := \frac{2 \cdot N_u^4 \cdot (A+B) \cdot (A+D)}{\sqrt{\left[2 \cdot N_u^4 \cdot (A+B) \cdot (A+D)\right]^2}}$$

$$Den := \frac{\sqrt{A} \cdot B \cdot C \cdot N_u^2 \cdot \left[\sqrt{A^3 + 6 \cdot D \cdot A^2 + A \cdot D \cdot (8 \cdot B + D) + 4 \cdot B^2 \cdot D} - A^{\frac{3}{2}} - \sqrt{A} \cdot D\right]}{\sqrt{\left[\sqrt{A} \cdot B \cdot C \cdot N_u^2 \cdot \left[\sqrt{A^3 + 6 \cdot D \cdot A^2 + A \cdot D \cdot (8 \cdot B + D) + 4 \cdot B^2 \cdot D} - A^{\frac{3}{2}} - \sqrt{A} \cdot D\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot (A+B) \cdot (A+D) \cdot \sqrt{A \cdot B^2 \cdot C^2 \cdot N_u^4 \cdot \left[\sqrt{A^3 + 6 \cdot D \cdot A^2 + A \cdot D \cdot (8 \cdot B + D) + 4 \cdot B^2 \cdot D} - A^{\frac{3}{2}} - \sqrt{A} \cdot D\right]^2}}{\sqrt{A} \cdot B \cdot C \cdot \left[\sqrt{A^3 + 6 \cdot D \cdot A^2 + A \cdot D \cdot (8 \cdot B + D) + 4 \cdot B^2 \cdot D} - A^{\frac{3}{2}} - \sqrt{A} \cdot D\right] \cdot \sqrt{N_u^8 \cdot (A+B)^2 \cdot (A+D)^2}} = 0$$



$N_1 = 0.53981$
$N_2 = 1.54713$
$N_3 = 2.77227$
$N_4 = 1.95630$
$R = 0.83763$

Unit. $AB := 1$ Given. $N_1 := .53981$ $N_2 := 1.54713$ $N_3 := 2.77227$

$N_4 := 1.95630$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{D \cdot N_u \cdot (A - B) \cdot \left(A^2 \cdot D - D \cdot A \cdot B - N_u \cdot B^2\right)}{A \cdot C \cdot \left(A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot D^2 + B^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)} = 0.837627$$

$$Num := \frac{D \cdot N_u \cdot (A - B) \cdot \left(A^2 \cdot D - D \cdot A \cdot B - N_u \cdot B^2\right)}{\sqrt{\left[D \cdot N_u \cdot (A - B) \cdot \left(A^2 \cdot D - D \cdot A \cdot B - N_u \cdot B^2\right)\right]^2}}$$

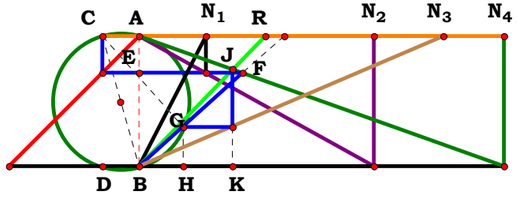
$$Den := \frac{A \cdot C \cdot \left(A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot D^2 + B^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)}{\sqrt{\left[A \cdot C \cdot \left(A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot D^2 + B^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot N_u \cdot (A - B) \cdot \left(A^2 \cdot D - D \cdot A \cdot B - N_u \cdot B^2\right) \cdot \sqrt{A^2 \cdot C^2 \cdot \left(A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot D^2 + B^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)^2}}{A \cdot C \cdot \sqrt{D^2 \cdot {N_u}^2 \cdot (A - B)^2 \cdot \left(A^2 \cdot D - D \cdot A \cdot B - N_u \cdot B^2\right)^2 \cdot \left(A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot D^2 + B^2 \cdot D^2 + B^2 \cdot {N_u}^2\right)}} = 0$$

4RST7B5R1



$N_1 = 0.51075$
$N_2 = 1.79896$
$N_3 = 2.33641$
$N_4 = 2.79896$
$R = 0.96414$

Unit. $AB := 1$ Given. $N_1 := .51075$ $N_2 := 1.79896$ $N_3 := 2.33641$

$N_4 := 2.79896$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{D \cdot N_u \cdot (A - B) \cdot \left(D \cdot A^2 - D \cdot A \cdot B - N_u \cdot B^2\right)}{A \cdot B^2 \cdot C \cdot {N_u}^2 + N_u \cdot B^2 \cdot D^2 \cdot (A - B) + A \cdot D^2 \cdot (A - B)^2 \cdot (C - D)} = 0.96416$$

$$Num := \frac{D \cdot N_u \cdot (A - B) \cdot \left(D \cdot A^2 - D \cdot A \cdot B - N_u \cdot B^2\right)}{\sqrt{\left[D \cdot N_u \cdot (A - B) \cdot \left(D \cdot A^2 - D \cdot A \cdot B - N_u \cdot B^2\right)\right]^2}}$$

$$Den := \frac{A \cdot B^2 \cdot C \cdot {N_u}^2 + N_u \cdot B^2 \cdot D^2 \cdot (A - B) + A \cdot D^2 \cdot (A - B)^2 \cdot (C - D)}{\sqrt{\left[A \cdot B^2 \cdot C \cdot {N_u}^2 + N_u \cdot B^2 \cdot D^2 \cdot (A - B) + A \cdot D^2 \cdot (A - B)^2 \cdot (C - D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D \cdot N_u \cdot \sqrt{\left[B^2 \cdot D^2 \cdot N_u \cdot (A - B) + A \cdot D^2 \cdot (A - B)^2 \cdot (C - D) + A \cdot B^2 \cdot C \cdot {N_u}^2\right]^2} \cdot (A - B) \cdot \left(D \cdot A^2 - D \cdot A \cdot B - N_u \cdot B^2\right)}{\left[B^2 \cdot D^2 \cdot N_u \cdot (A - B) + A \cdot D^2 \cdot (A - B)^2 \cdot (C - D) + A \cdot B^2 \cdot C \cdot {N_u}^2\right] \cdot \sqrt{D^2 \cdot {N_u}^2 \cdot (A - B)^2 \cdot \left(D \cdot A^2 - D \cdot A \cdot B - N_u \cdot B^2\right)^2}} = 0$$

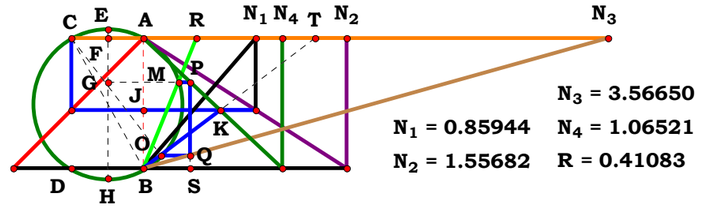
4RST7AB5R2

Unit.

$AB := 1$

Given.

$N_1 := .85944$ $N_2 := 1.55682$ $N_3 := 3.56650$ $N_4 := 1.06521$



$N_3 = 3.56650$

$N_1 = 0.85944$ $N_4 = 1.06521$

$N_2 = 1.55682$ $R = 0.41083$

Descriptions.

$AC := \frac{N_1}{N_2}$ $AJ := \frac{N_1}{N_2}$

$JK := N_4 \cdot AJ$ $AT := \frac{JK}{AB - AJ}$

$EH := \sqrt{AB^2 + AC^2}$ $AF := \frac{AC}{2}$

$EF := \frac{EH - AB}{2}$ $BT := \sqrt{AB^2 + AT^2}$

$CT := AT + AC$ $OT := \frac{CT \cdot AT}{BT}$

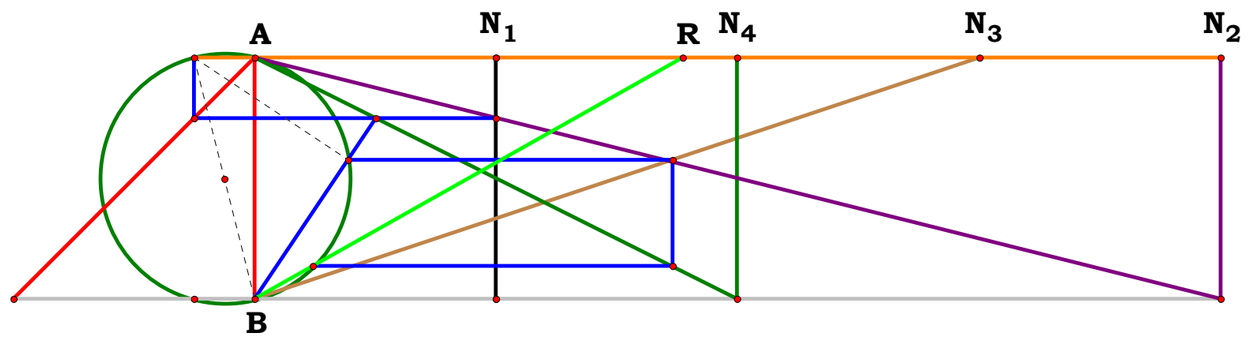
$BO := BT - OT$ $OS := \frac{BO}{BT}$

$BS := N_3 \cdot OS$ $PS := \frac{N_4 - BS}{N_4}$

$GH := PS + EF$ $GM := \sqrt{GH \cdot (EH - GH)}$

$R := \frac{GM - AF}{PS}$ $R = 0.410843$

Definitions.



$N_1 = 1.00000$ $AB = 1.00000$ $EH = 1.03078$ $OT = 0.50848$ $GH = 0.15000$

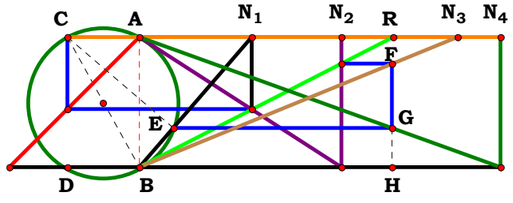
$N_2 = 4.00000$ $AC = 0.25000$ $AF = 0.12500$ $BO = 0.69338$ $GM = 0.36348$

$N_3 = 3.00000$ $AJ = 0.25000$ $EF = 0.01539$ $OS = 0.57692$ $R - \frac{GM - AF}{PS} = 0.00000$

$N_4 = 2.00000$ $JK = 0.50000$ $BT = 1.20185$ $BS = 1.73077$

$R = 1.77158$ $AT = 0.66667$ $CT = 0.91667$ $PS = 0.13462$

4RST7B5R3



$N_1 = 0.85944$
$N_2 = 1.54713$
$N_3 = 2.44295$
$N_4 = 2.76991$
$R = 1.95088$

Unit. $AB := 1$ Given. $N_1 := .85944$ $N_2 := 1.54713$ $N_3 := 2.44295$

$N_4 := 2.76991$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{D\cdot\left(A^2+{N_u}^2\right)}{B\cdot C\cdot\left(B+N_u\right)} = 1.950874$$

$$Num := \frac{D\cdot\left(A^2+{N_u}^2\right)}{\sqrt{\left[D\cdot\left(A^2+{N_u}^2\right)\right]^2}}$$

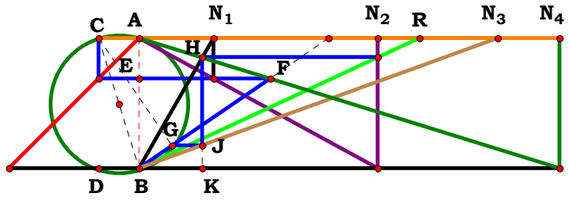
$$Den := \frac{B\cdot C\cdot\left(B+N_u\right)}{\sqrt{\left[B\cdot C\cdot\left(B+N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D\cdot\left(A^2+{N_u}^2\right)\cdot\sqrt{B^2\cdot C^2\cdot\left(B+N_u\right)^2}}{B\cdot C\cdot\sqrt{D^2\cdot\left(A^2+{N_u}^2\right)^2}\cdot\left(B+N_u\right)} = 0$$

4RST7B5R4



$N_1 = 0.56887$
$N_2 = 1.82802$
$N_3 = 2.75290$
$N_4 = 3.22514$
$R = 2.14906$

Unit. $AB := 1$ Given. $N_1 := .56887$ $N_2 := 1.82802$ $N_3 := 2.75290$

$N_4 := 3.22514$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot C \cdot N_u \cdot \left(A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot D^2 + B^2 \cdot D^2 + B^2 \cdot N_u{}^2\right)}{A^2 \cdot B \cdot D^2 \cdot (A - 2 \cdot B) \cdot (C - D) + A \cdot B^3 \cdot \left(D^2 \cdot N_u - D^3 + C \cdot D^2 + C \cdot N_u{}^2\right) - B^4 \cdot D^2 \cdot N_u} = 2.149049$$

$$Num := \frac{A \cdot C \cdot N_u \cdot \left(A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot D^2 + B^2 \cdot D^2 + B^2 \cdot N_u{}^2\right)}{\sqrt{\left[A \cdot C \cdot N_u \cdot \left(A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot D^2 + B^2 \cdot D^2 + B^2 \cdot N_u{}^2\right)\right]^2}}$$

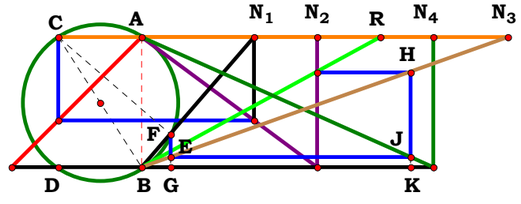
$$Den := \frac{A^2 \cdot B \cdot D^2 \cdot (A - 2 \cdot B) \cdot (C - D) + A \cdot B^3 \cdot \left(D^2 \cdot N_u - D^3 + C \cdot D^2 + C \cdot N_u{}^2\right) - B^4 \cdot D^2 \cdot N_u}{\sqrt{\left[A^2 \cdot B \cdot D^2 \cdot (A - 2 \cdot B) \cdot (C - D) + A \cdot B^3 \cdot \left(D^2 \cdot N_u - D^3 + C \cdot D^2 + C \cdot N_u{}^2\right) - B^4 \cdot D^2 \cdot N_u\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot C \cdot N_u \cdot \sqrt{\left[A \cdot B^3 \cdot \left(D^2 \cdot N_u - D^3 + C \cdot D^2 + C \cdot N_u{}^2\right) - B^4 \cdot D^2 \cdot N_u + A^2 \cdot B \cdot D^2 \cdot (A - 2 \cdot B) \cdot (C - D)\right]^2} \cdot \left(A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot D^2 + B^2 \cdot D^2 + B^2 \cdot N_u{}^2\right)}{\left[A \cdot B^3 \cdot \left(D^2 \cdot N_u - D^3 + C \cdot D^2 + C \cdot N_u{}^2\right) - B^4 \cdot D^2 \cdot N_u + A^2 \cdot B \cdot D^2 \cdot (A - 2 \cdot B) \cdot (C - D)\right] \cdot \sqrt{A^2 \cdot C^2 \cdot N_u{}^2 \cdot \left(A^2 \cdot D^2 - 2 \cdot A \cdot B \cdot D^2 + B^2 \cdot D^2 + B^2 \cdot N_u{}^2\right)^2}} = 0$$

4RST7B5R5



$N_1 = 0.85944$
$N_2 = 1.34373$
$N_3 = 2.81101$
$N_4 = 2.23719$
$R = 1.83359$

Unit. $AB := 1$ **Given.** $N_1 := .85944$ $N_2 := 1.34373$ $N_3 := 2.81101$

$N_4 := 2.23719$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot D \cdot N_u \cdot \left(A^2 + N_u{}^2\right)}{A^2 \cdot B \cdot C \cdot (A - C) + B \cdot C \cdot N_u \cdot \left(B \cdot C + A \cdot N_u\right)} = 1.833581$$

$$Num := \frac{A \cdot D \cdot N_u \cdot \left(A^2 + N_u{}^2\right)}{\sqrt{\left[A \cdot D \cdot N_u \cdot \left(A^2 + N_u{}^2\right)\right]^2}}$$

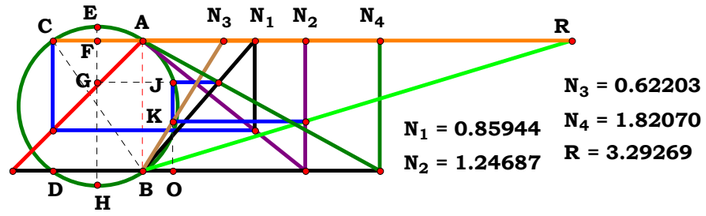
$$Den := \frac{A^2 \cdot B \cdot C \cdot (A - C) + B \cdot C \cdot N_u \cdot \left(B \cdot C + A \cdot N_u\right)}{\sqrt{\left[A^2 \cdot B \cdot C \cdot (A - C) + B \cdot C \cdot N_u \cdot \left(B \cdot C + A \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot D \cdot N_u \cdot \sqrt{\left[B \cdot C \cdot N_u \cdot \left(B \cdot C + A \cdot N_u\right) + A^2 \cdot B \cdot C \cdot (A - C)\right]^2} \cdot \left(A^2 + N_u{}^2\right)}{\left[B \cdot C \cdot N_u \cdot \left(B \cdot C + A \cdot N_u\right) + A^2 \cdot B \cdot C \cdot (A - C)\right] \cdot \sqrt{A^2 \cdot D^2 \cdot N_u{}^2 \cdot \left(A^2 + N_u{}^2\right)^2}} = 0$$

4RST7B5R6



Unit. $AB := 1$ Given. $N_1 := .85944$ $N_2 := 1.24687$ $N_3 := .62203$

$N_4 := 1.82070$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2 \cdot A \cdot N_u^{\,2} \cdot (A + D)}{B \cdot C \cdot \left(\sqrt{4 \cdot A^3 \cdot D + A^2 \cdot B^2 + 2 \cdot A \cdot B^2 \cdot D + B^2 \cdot D^2} - A \cdot B - B \cdot D\right)} = 3.29271$$

$$Num := \frac{2 \cdot A \cdot N_u^{\,2} \cdot (A + D)}{\sqrt{\left[2 \cdot A \cdot N_u^{\,2} \cdot (A + D)\right]^2}}$$

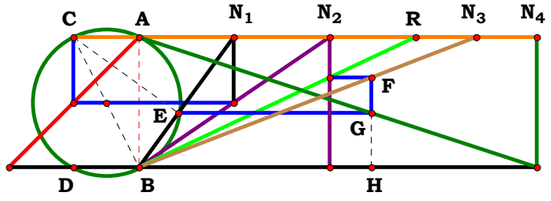
$$Den := \frac{B \cdot C \cdot \left(\sqrt{4 \cdot A^3 \cdot D + A^2 \cdot B^2 + 2 \cdot A \cdot B^2 \cdot D + B^2 \cdot D^2} - A \cdot B - B \cdot D\right)}{\sqrt{\left[B \cdot C \cdot \left(\sqrt{4 \cdot A^3 \cdot D + A^2 \cdot B^2 + 2 \cdot A \cdot B^2 \cdot D + B^2 \cdot D^2} - A \cdot B - B \cdot D\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u^{\,2} \cdot (A + D) \cdot \sqrt{B^2 \cdot C^2 \cdot \left(\sqrt{4 \cdot A^3 \cdot D + A^2 \cdot B^2 + 2 \cdot A \cdot B^2 \cdot D + B^2 \cdot D^2} - A \cdot B - B \cdot D\right)^2}}{B \cdot C \cdot \left(\sqrt{4 \cdot A^3 \cdot D + A^2 \cdot B^2 + 2 \cdot A \cdot B^2 \cdot D + B^2 \cdot D^2} - A \cdot B - B \cdot D\right) \cdot \sqrt{A^2 \cdot N_u^{\,4} \cdot (A + D)^2}} = 0$$

4RST7B6R3



$N_1 = 0.72384$
$N_2 = 1.45996$
$N_3 = 2.58824$
$N_4 = 3.05079$
$R = 2.12346$

Unit. $AB := 1$ Given. $N_1 := .72384$ $N_2 := 1.45996$ $N_3 := 2.58824$

$N_4 := 3.05079$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{D\cdot\left(A^2+{N_u}^2\right)}{B\cdot C\cdot\left(A-B+N_u\right)} = 2.123466$$

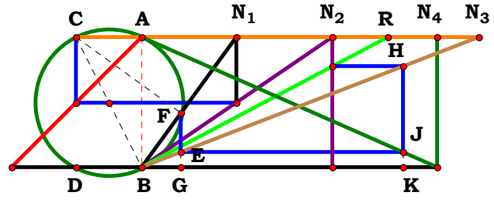
$$Num := \frac{D\cdot\left(A^2+{N_u}^2\right)}{\sqrt{\left[D\cdot\left(A^2+{N_u}^2\right)\right]^2}}$$

$$Den := \frac{B\cdot C\cdot\left(A-B+N_u\right)}{\sqrt{\left[B\cdot C\cdot\left(A-B+N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{D\cdot\left(A^2+{N_u}^2\right)\cdot\sqrt{B^2\cdot C^2\cdot\left(A-B+N_u\right)^2}}{B\cdot C\cdot\sqrt{D^2\cdot\left(A^2+{N_u}^2\right)^2}\cdot\left(A-B+N_u\right)} = 0$$



$N_1 = 0.72384$
$N_2 = 1.45996$
$N_3 = 2.58824$
$N_4 = 2.26624$
$R = 1.88734$

Unit. $AB := 1$ Given. $N_1 := .72384$ $N_2 := 1.45996$ $N_3 := 2.58824$

$N_4 := 2.26624$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A \cdot D \cdot N_u \cdot \left(A^2 + {N_u}^2\right)}{B \cdot C \cdot \left[A^3 - C \cdot A^2 + N_u \cdot \left[C \cdot (A - B) + A \cdot N_u\right]\right]} = 1.887347$$

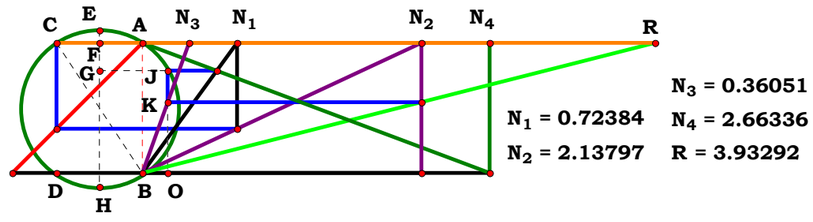
$$Num := \frac{A \cdot D \cdot N_u \cdot \left(A^2 + {N_u}^2\right)}{\sqrt{\left[A \cdot D \cdot N_u \cdot \left(A^2 + {N_u}^2\right)\right]^2}}$$

$$Den := \frac{B \cdot C \cdot \left[A^3 - C \cdot A^2 + N_u \cdot \left[C \cdot (A - B) + A \cdot N_u\right]\right]}{\sqrt{\left[B \cdot C \cdot \left[A^3 - C \cdot A^2 + N_u \cdot \left[C \cdot (A - B) + A \cdot N_u\right]\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot D \cdot N_u \cdot \left(A^2 + {N_u}^2\right) \cdot \sqrt{B^2 \cdot C^2 \cdot \left[A^3 + N_u \cdot \left[A \cdot N_u + C \cdot (A - B)\right] - A^2 \cdot C\right]^2}}{B \cdot C \cdot \left[A^3 + N_u \cdot \left[A \cdot N_u + C \cdot (A - B)\right] - A^2 \cdot C\right] \cdot \sqrt{A^2 \cdot D^2 \cdot {N_u}^2 \cdot \left(A^2 + {N_u}^2\right)^2}} = 0$$



Unit. $AB := 1$ Given. $N_1 := .72384$ $N_2 := 2.13797$ $N_3 := .36051$

$N_4 := 2.66336$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2 \cdot A \cdot N_u^{\,2} \cdot (A + D)}{B \cdot C \cdot \left[\sqrt{B^2 \cdot (A + D)^2 + A^2 \cdot \left(A^2 + 6 \cdot A \cdot D + D^2\right)} - 2 \cdot A \cdot B \cdot (A + D)^2 - (A + D) \cdot (A - B)\right]} = 3.93294$$

$$Num := \frac{2 \cdot A \cdot N_u^{\,2} \cdot (A + D)}{\sqrt{\left[2 \cdot A \cdot N_u^{\,2} \cdot (A + D)\right]^2}}$$

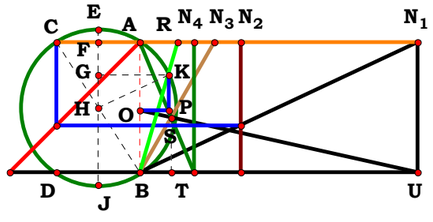
$$Den := \frac{B \cdot C \cdot \left[\sqrt{B^2 \cdot (A + D)^2 + A^2 \cdot \left(A^2 + 6 \cdot A \cdot D + D^2\right)} - 2 \cdot A \cdot B \cdot (A + D)^2 - (A + D) \cdot (A - B)\right]}{\sqrt{\left[B \cdot C \cdot \left[\sqrt{B^2 \cdot (A + D)^2 + A^2 \cdot \left(A^2 + 6 \cdot A \cdot D + D^2\right)} - 2 \cdot A \cdot B \cdot (A + D)^2 - (A + D) \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u^{\,2} \cdot (A + D) \cdot \sqrt{B^2 \cdot C^2 \cdot \left[\sqrt{B^2 \cdot (A + D)^2 + A^2 \cdot \left(A^2 + 6 \cdot A \cdot D + D^2\right)} - 2 \cdot A \cdot B \cdot (A + D)^2 - (A + D) \cdot (A - B)\right]^2}}{B \cdot C \cdot \left[\sqrt{B^2 \cdot (A + D)^2 + A^2 \cdot \left(A^2 + 6 \cdot A \cdot D + D^2\right)} - 2 \cdot A \cdot B \cdot (A + D)^2 - (A + D) \cdot (A - B)\right] \cdot \sqrt{A^2 \cdot N_u^{\,4} \cdot (A + D)^2}} = 0$$

4RST8B1R0



$N_1 = 2.12828$
$N_2 = 0.77227$
$N_3 = 0.57360$
$N_4 = 0.41626$
$R = 0.29164$

Unit. $AB := 1$ Given. $N_1 := 2.12828$ $N_2 := .77227$ $N_3 := .57360$

$N_4 := .41626$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(D-A)\cdot\sqrt{A\cdot B}}{\sqrt{A}\cdot\sqrt{N_u\cdot\left[B\cdot D^2\cdot(C-A+D)^2-4\cdot B\cdot N_u{}^2\cdot(A-D)^2-4\cdot D\cdot N_u\cdot(A-B)\cdot(A-D)\cdot(C-A+D)\right]}+D\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot(C-A+D)} = 0.291643$$

$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(D-A)\cdot\sqrt{A\cdot B}}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^3\cdot(D-A)\cdot\sqrt{A\cdot B}\right]^2}}$$

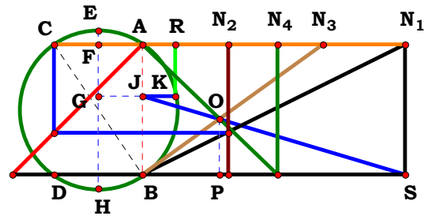
$$Den := \frac{\sqrt{A}\cdot\sqrt{N_u\cdot\left[B\cdot D^2\cdot(C-A+D)^2-4\cdot B\cdot N_u{}^2\cdot(A-D)^2-4\cdot D\cdot N_u\cdot(A-B)\cdot(A-D)\cdot(C-A+D)\right]}+D\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot(C-A+D)}{\sqrt{\left[\sqrt{A}\cdot\sqrt{N_u\cdot\left[B\cdot D^2\cdot(C-A+D)^2-4\cdot B\cdot N_u{}^2\cdot(A-D)^2-4\cdot D\cdot N_u\cdot(A-B)\cdot(A-D)\cdot(C-A+D)\right]}+D\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot(C-A+D)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u{}^{\frac{3}{2}}\cdot\sqrt{\left[\sqrt{A}\cdot\sqrt{-N_u\cdot\left[4\cdot B\cdot N_u{}^2\cdot(A-D)^2-B\cdot D^2\cdot(C-A+D)^2+4\cdot D\cdot N_u\cdot(A-B)\cdot(A-D)\cdot(C-A+D)\right]}+D\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot(C-A+D)\right]^2}\cdot\sqrt{A\cdot B}\cdot(D-A)}{\left[\sqrt{A}\cdot\sqrt{-N_u\cdot\left[4\cdot B\cdot N_u{}^2\cdot(A-D)^2-B\cdot D^2\cdot(C-A+D)^2+4\cdot D\cdot N_u\cdot(A-B)\cdot(A-D)\cdot(C-A+D)\right]}+D\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot(C-A+D)\right]\cdot\sqrt{A\cdot B\cdot N_u{}^3\cdot(D-A)^2}} = 0$$

4RST8B1R1



$N_1 = 2.01205$
$N_2 = 0.65604$
$N_3 = 1.38720$
$N_4 = 1.03615$
$R = 0.25654$

Unit. $AB := 1$ **Given.** $N_1 := 2.01205$ $N_2 := .65604$ $N_3 := 1.38720$

$N_4 := 1.03615$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

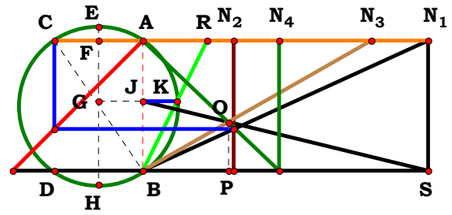
$$\frac{(A-C-D)\cdot(A-B)-\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}}{2\cdot B\cdot(A-C-D)} = 0.256535$$

$$Num := \frac{(A-C-D)\cdot(A-B)-\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}}{\sqrt{\left[(A-C-D)\cdot(A-B)-\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}\right]^2}}$$

$$Den := \frac{2\cdot B\cdot(A-C-D)}{\sqrt{[2\cdot B\cdot(A-C-D)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{\sqrt{B^2\cdot(C-A+D)^2}\cdot\left[\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}+(A-B)\cdot(C-A+D)\right]}{B\cdot\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)}+(A-B)\cdot(C-A+D)\right]^2}\cdot(C-A+D)} = 0$$



$N_1 = 2.18639$
$N_2 = 0.69478$
$N_3 = 1.75526$
$N_4 = 1.04584$
$R = 0.49374$

Unit. $AB := 1$ Given. $N_1 := 2.18639$ $N_2 := .69478$ $N_3 := 1.75526$

$N_4 := 1.04584$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{(C - A + D)\cdot(A - B) + \sqrt{C^2\cdot(A - B)^2 - 2\cdot C\cdot\left(A^2 - 2\cdot A\cdot B + 3\cdot B^2\right)\cdot(A - D) + (A - D)^2\cdot(A - B)^2}}{2\cdot B\cdot C} = 0.493733$$

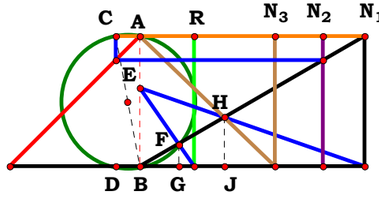
$$Num := \frac{(C - A + D)\cdot(A - B) + \sqrt{C^2\cdot(A - B)^2 - 2\cdot C\cdot\left(A^2 - 2\cdot A\cdot B + 3\cdot B^2\right)\cdot(A - D) + (A - D)^2\cdot(A - B)^2}}{\sqrt{\left[(C - A + D)\cdot(A - B) + \sqrt{C^2\cdot(A - B)^2 - 2\cdot C\cdot\left(A^2 - 2\cdot A\cdot B + 3\cdot B^2\right)\cdot(A - D) + (A - D)^2\cdot(A - B)^2}\right]^2}}$$

$$Den := \frac{2\cdot B\cdot C}{\sqrt{(2\cdot B\cdot C)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{B^2\cdot C^2}\cdot\left[\sqrt{C^2\cdot(A - B)^2 + (A - B)^2\cdot(A - D)^2 - 2\cdot C\cdot(A - D)\cdot\left(A^2 - 2\cdot A\cdot B + 3\cdot B^2\right)} + (A - B)\cdot(C - A + D)\right]}{B\cdot C\cdot\sqrt{\left[\sqrt{C^2\cdot(A - B)^2 + (A - B)^2\cdot(A - D)^2 - 2\cdot C\cdot(A - D)\cdot\left(A^2 - 2\cdot A\cdot B + 3\cdot B^2\right)} + (A - B)\cdot(C - A + D)\right]^2}} = 0$$

4RST8B1R4



$N_1 = 1.72148$
$N_2 = 1.40185$
$N_3 = 1.03851$
$R = 0.41304$

Unit. $AB := 1$ Given. $N_1 := 1.72148$ $N_2 := 1.40185$ $N_3 := 1.03851$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left[A \cdot B + N_u \cdot (A - B)\right]}{A \cdot B \cdot (A - C) - N_u \cdot \left[C \cdot (A - B) - B \cdot N_u\right]} = 0.413038$$

$$Num := \frac{N_u \cdot \left[A \cdot B + N_u \cdot (A - B)\right]}{\sqrt{\left[N_u \cdot \left[A \cdot B + N_u \cdot (A - B)\right]\right]^2}}$$

$$Den := \frac{A \cdot B \cdot (A - C) - N_u \cdot \left[C \cdot (A - B) - B \cdot N_u\right]}{\sqrt{\left[A \cdot B \cdot (A - C) - N_u \cdot \left[C \cdot (A - B) - B \cdot N_u\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[A \cdot B + N_u \cdot (A - B)\right] \cdot \sqrt{\left[N_u \cdot \left[B \cdot N_u - C \cdot (A - B)\right] + A \cdot B \cdot (A - C)\right]^2}}{\left[N_u \cdot \left[B \cdot N_u - C \cdot (A - B)\right] + A \cdot B \cdot (A - C)\right] \cdot \sqrt{{N_u}^2 \cdot \left[A \cdot B + N_u \cdot (A - B)\right]^2}} = 0$$

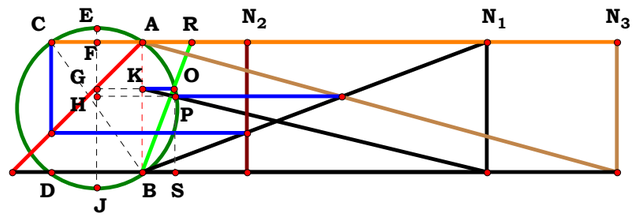
4RST8AB1R5

Unit.

$AB := 1$

Given.

$N_1 := 2.64163$ $N_2 := .80133$ $N_3 := 3.64399$



$N_1 = 2.64163$
$N_2 = 0.80133$
$N_3 = 3.64399$
$R = 0.38058$

Descriptions.

$$AC := \frac{N_1 - N_2}{N_1} \qquad EJ := \sqrt{AB^2 + AC^2}$$

$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

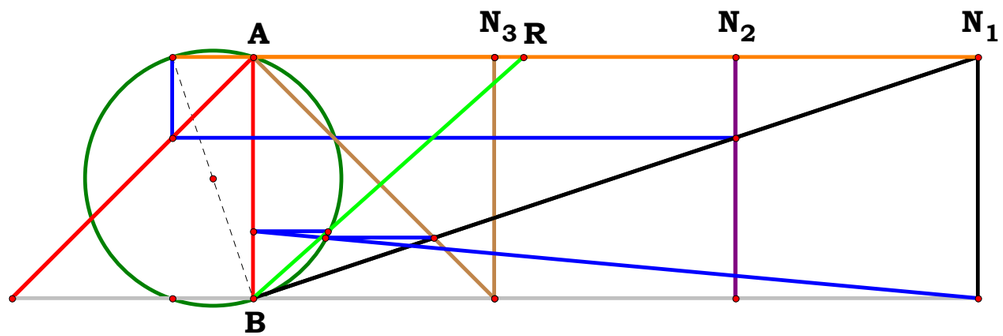
$$PS := \frac{N_3}{N_1 + N_3} \qquad HJ := PS + EF$$

$$HP := \sqrt{HJ \cdot (EJ - HJ)} \qquad BS := HP - AF$$

$$BK := \frac{PS \cdot N_1}{N_1 - BS} \qquad GJ := BK + EF$$

$$GO := \sqrt{GJ \cdot (EJ - GJ)} \qquad KO := GO - AF$$

$$R := \frac{KO}{BK} \qquad R = 0.380582$$



$N_1 = 3.00000$ $AB = 1.00000$ $EF = 0.02705$ $BS = 0.29731$ $KO = 0.31111$

$N_2 = 2.00000$ $AC = 0.33333$ $PS = 0.25000$ $BK = 0.27750$ $R - \frac{KO}{BK} = 0.00000$

$N_3 = 1.00000$ $EJ = 1.05409$ $HJ = 0.27705$ $GJ = 0.30455$

$R = 1.12112$ $AF = 0.16667$ $HP = 0.46398$ $GO = 0.47778$

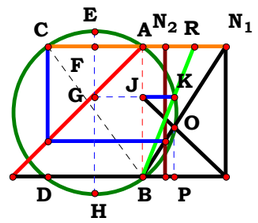
Definitions.

$$A := \sqrt{AC^2 \cdot (N_1 + N_3)^2 + 4 \cdot N_1 \cdot N_3} \qquad B := \sqrt{(N_1 + N_3)^2} \qquad C := \sqrt{(N_1 + N_3)^2 \cdot [A - B \cdot (AC + 2 \cdot N_1)]^2}$$

$$D := \sqrt{AC^2 \cdot (N_1 + N_3)^2 \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)^2 - 8 \cdot B \cdot N_1 \cdot N_3 \cdot [(N_1 + N_3) \cdot (A - AC \cdot B) - 2 \cdot B \cdot N_1^2]}$$

$$R - \frac{(AC \cdot C - D) \cdot (N_1 + N_3) \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)}{4 \cdot B \cdot C \cdot N_1 \cdot N_3} = 0$$

4RST8B1R6



$N_1 = 0.63667$

$N_2 = 0.17175$

$R = 0.39564$

Unit. $AB := 1$ Given. $N_1 := .63667$ $N_2 := .17175$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{\sqrt{B^2 \cdot {N_u}^4 \cdot (A-B)^2 + \left[2 \cdot A \cdot B \cdot {N_u}^3 \cdot \left(2 \cdot A \cdot B - A^2 + B^2\right) - 12 \cdot A^3 \cdot B^3 \cdot N_u\right] \cdot (A-B) + A^2 \cdot {N_u}^2 \cdot \left(A^2 - 3 \cdot B^2\right) \cdot \left(A^2 - 4 \cdot A \cdot B + B^2\right) - 4 \cdot A^4 \cdot B^4} - N_u \cdot (A-B) \cdot \left(A^2 - B \cdot A - B \cdot N_u\right)}{2 \cdot A \cdot B \cdot \left(A \cdot B + A \cdot N_u - B \cdot N_u\right)} = 0.395642$$

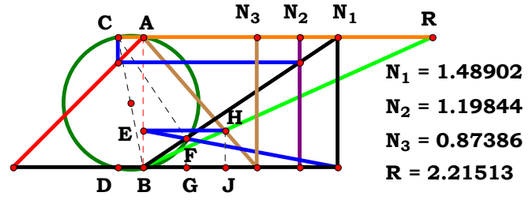
$$Num := \frac{\sqrt{B^2 \cdot {N_u}^4 \cdot (A-B)^2 + \left[2 \cdot A \cdot B \cdot {N_u}^3 \cdot \left(2 \cdot A \cdot B - A^2 + B^2\right) - 12 \cdot A^3 \cdot B^3 \cdot N_u\right] \cdot (A-B) + A^2 \cdot {N_u}^2 \cdot \left(A^2 - 3 \cdot B^2\right) \cdot \left(A^2 - 4 \cdot A \cdot B + B^2\right) - 4 \cdot A^4 \cdot B^4} - N_u \cdot (A-B) \cdot \left(A^2 - B \cdot A - B \cdot N_u\right)}{\sqrt{\left[\sqrt{B^2 \cdot {N_u}^4 \cdot (A-B)^2 + \left[2 \cdot A \cdot B \cdot {N_u}^3 \cdot \left(2 \cdot A \cdot B - A^2 + B^2\right) - 12 \cdot A^3 \cdot B^3 \cdot N_u\right] \cdot (A-B) + A^2 \cdot {N_u}^2 \cdot \left(A^2 - 3 \cdot B^2\right) \cdot \left(A^2 - 4 \cdot A \cdot B + B^2\right) - 4 \cdot A^4 \cdot B^4} - N_u \cdot (A-B) \cdot \left(A^2 - B \cdot A - B \cdot N_u\right)\right]^2}}$$

$$Den := \frac{2 \cdot A \cdot B \cdot \left(A \cdot B + A \cdot N_u - B \cdot N_u\right)}{\sqrt{\left[2 \cdot A \cdot B \cdot \left(A \cdot B + A \cdot N_u - B \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\begin{array}{l}\sqrt{B^2 \cdot {N_u}^4 \cdot (A-B)^2 - \left[12 \cdot A^3 \cdot B^3 \cdot N_u - 2 \cdot A \cdot B \cdot {N_u}^3 \cdot \left(2 \cdot A \cdot B - A^2 + B^2\right)\right] \cdot (A-B) - 4 \cdot A^4 \cdot B^4 + A^2 \cdot {N_u}^2 \cdot \left(A^2 - 3 \cdot B^2\right) \cdot \left(A^2 - 4 \cdot A \cdot B + B^2\right)} \ \ldots \\ + \ N_u \cdot (A-B) \cdot \left(B \cdot A - A^2 + B \cdot N_u\right)\end{array}\right] \cdot \sqrt{A^2 \cdot B^2 \cdot \left(A \cdot B + A \cdot N_u - B \cdot N_u\right)^2}}{A \cdot B \cdot \sqrt{\left[\begin{array}{l}\sqrt{B^2 \cdot {N_u}^4 \cdot (A-B)^2 - \left[12 \cdot A^3 \cdot B^3 \cdot N_u - 2 \cdot A \cdot B \cdot {N_u}^3 \cdot \left(2 \cdot A \cdot B - A^2 + B^2\right)\right] \cdot (A-B) - 4 \cdot A^4 \cdot B^4 + A^2 \cdot {N_u}^2 \cdot \left(A^2 - 3 \cdot B^2\right) \cdot \left(A^2 - 4 \cdot A \cdot B + B^2\right)} \ \ldots \\ + \ N_u \cdot (A-B) \cdot \left(B \cdot A - A^2 + B \cdot N_u\right)\end{array}\right]^2} \cdot \left(A \cdot B + A \cdot N_u - B \cdot N_u\right)} = 0$$

4RST8AB1R7



Unit. $AB := 1$ Given. $N_1 := 1.48902$ $N_2 := 1.19844$ $N_3 := .87386$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{B \cdot {N_u}^3 - A \cdot N_u \cdot \left[A \cdot B + 2 \cdot N_u \cdot (A - B)\right]}{A \cdot C \cdot \left[A \cdot B + N_u \cdot (A - B)\right]} = 2.215187$$

$$Num := \frac{B \cdot {N_u}^3 - A \cdot N_u \cdot \left[A \cdot B + 2 \cdot N_u \cdot (A - B)\right]}{\sqrt{\left[B \cdot {N_u}^3 - A \cdot N_u \cdot \left[A \cdot B + 2 \cdot N_u \cdot (A - B)\right]\right]^2}}$$

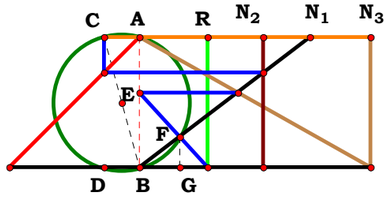
$$Den := \frac{A \cdot C \cdot \left[A \cdot B + N_u \cdot (A - B)\right]}{\sqrt{\left[A \cdot C \cdot \left[A \cdot B + N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[B \cdot {N_u}^3 - A \cdot N_u \cdot \left[A \cdot B + 2 \cdot N_u \cdot (A - B)\right]\right] \cdot \sqrt{A^2 \cdot C^2 \cdot \left[A \cdot B + N_u \cdot (A - B)\right]^2}}{A \cdot C \cdot \left[A \cdot B + N_u \cdot (A - B)\right] \cdot \sqrt{\left[B \cdot {N_u}^3 - A \cdot N_u \cdot \left[A \cdot B + 2 \cdot N_u \cdot (A - B)\right]\right]^2}} = 0$$

4RST8B1R8



$N_1 = 1.30499$
$N_2 = 0.94661$
$N_3 = 1.77463$
$R = 0.52676$

Unit. $AB := 1$ Given. $N_1 := 1.30499$ $N_2 := .94661$ $N_3 := 1.77463$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (A \cdot B + A \cdot N_u - B \cdot N_u)}{B \cdot {N_u}^2 + (A \cdot B - A^2 - A \cdot C + B \cdot C) \cdot N_u - A \cdot B \cdot C} = 0.526755$$

$$Num := \frac{N_u \cdot (A \cdot B + A \cdot N_u - B \cdot N_u)}{\sqrt{[N_u \cdot (A \cdot B + A \cdot N_u - B \cdot N_u)]^2}}$$

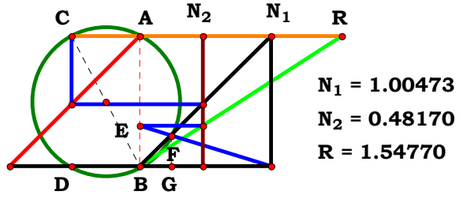
$$Den := \frac{B \cdot {N_u}^2 + (A \cdot B - A^2 - A \cdot C + B \cdot C) \cdot N_u - A \cdot B \cdot C}{\sqrt{[B \cdot {N_u}^2 + (A \cdot B - A^2 - A \cdot C + B \cdot C) \cdot N_u - A \cdot B \cdot C]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{[B \cdot {N_u}^2 + (A \cdot B - A^2 - A \cdot C + B \cdot C) \cdot N_u - A \cdot B \cdot C]^2} \cdot (A \cdot B + A \cdot N_u - B \cdot N_u)}{\sqrt{{N_u}^2 \cdot (A \cdot B + A \cdot N_u - B \cdot N_u)^2} \cdot [B \cdot {N_u}^2 + (A \cdot B - A^2 - A \cdot C + B \cdot C) \cdot N_u - A \cdot B \cdot C]} = 0$$

4RST8B1R9



$N_1 = 1.00473$

$N_2 = 0.48170$

$R = 1.54770$

Unit. $AB := 1$ Given. $N_1 := 1.21782$ $N_2 := .86913$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u^2 \cdot \left(B \cdot A - A^2 + B \cdot N_u\right)}{A \cdot B \cdot \left[A \cdot B + N_u \cdot (A - B)\right]} = 2.444383$$

$$Num := \frac{N_u^2 \cdot \left(B \cdot A - A^2 + B \cdot N_u\right)}{\sqrt{\left[N_u^2 \cdot \left(B \cdot A - A^2 + B \cdot N_u\right)\right]^2}}$$

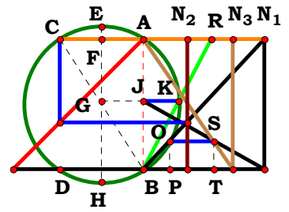
$$Den := \frac{A \cdot B \cdot \left[A \cdot B + N_u \cdot (A - B)\right]}{\sqrt{\left[A \cdot B \cdot \left[A \cdot B + N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \left(B \cdot A - A^2 + B \cdot N_u\right) \cdot \sqrt{A^2 \cdot B^2 \cdot \left[A \cdot B + N_u \cdot (A - B)\right]^2}}{A \cdot B \cdot \left[A \cdot B + N_u \cdot (A - B)\right] \cdot \sqrt{N_u^4 \cdot \left(B \cdot A - A^2 + B \cdot N_u\right)^2}} = 0$$

4RST8B1R10



$N_1 = 0.92724$
$N_2 = 0.33641$
$N_3 = 0.68983$
$R = 0.52232$

Unit. $AB := 1$ Given. $N_1 := .92724$ $N_2 := .33641$ $N_3 := .68983$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{B^2\cdot C^2\cdot\left[N_u{}^2\cdot(A-B)-A^3+A^2\cdot B+2\cdot A\cdot B\cdot N_u\right]^2+A^2\cdot N_u{}^2\cdot(A-B)^2\cdot\left(B\cdot A-A^2+B\cdot N_u\right)^2\ \ldots}}{+\ -2\cdot A\cdot B\cdot C\cdot N_u\cdot\left(B\cdot A-A^2+B\cdot N_u\right)\cdot\left[N_u{}^2\cdot(A-B)^2+A^2\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)+2\cdot A\cdot B\cdot N_u\cdot(A-B)\right]}\ +(A-B)\cdot\left[(B\cdot C-A\cdot B)\cdot N_u{}^2+\left(A^3-A^2\cdot B\right)\cdot N_u+A^2\cdot B\cdot C\right]}{2\cdot A\cdot B\cdot C\cdot\left(A\cdot B+A\cdot N_u-B\cdot N_u\right)}=0.52231$$

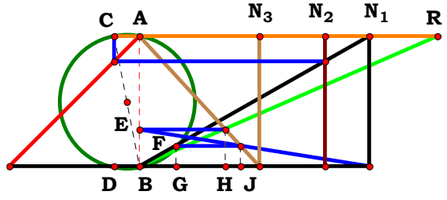
$$Num := \frac{\sqrt{B^2\cdot C^2\cdot\left[N_u{}^2\cdot(A-B)-A^3+A^2\cdot B+2\cdot A\cdot B\cdot N_u\right]^2+A^2\cdot N_u{}^2\cdot(A-B)^2\cdot\left(B\cdot A-A^2+B\cdot N_u\right)^2\ \ldots}}{+\ -2\cdot A\cdot B\cdot C\cdot N_u\cdot\left(B\cdot A-A^2+B\cdot N_u\right)\cdot\left[N_u{}^2\cdot(A-B)^2+A^2\cdot\left(A^2-2\cdot A\cdot B+3\cdot B^2\right)+2\cdot A\cdot B\cdot N_u\cdot(A-B)\right]}\ +(A-B)\cdot\left[(B\cdot C-A\cdot B)\cdot N_u{}^2+\left(A^3-A^2\cdot B\right)\cdot N_u+A^2\cdot B\cdot C\right]}{\sqrt{\left[\sqrt{B^2\cdot C^2\cdot\left[N_u{}^2\cdot(A-B)-A^3+A^2\cdot B+2\cdot A\cdot B\cdot N_u\right]^2+A^2\cdot N_u{}^2\cdot(A-B)^2\cdot\left(B\cdot A-A^2+B\cdot N_u\right)^2\ \ldots}\right]^2}}$$

$$Den := \frac{2\cdot A\cdot B\cdot C\cdot\left(A\cdot B+A\cdot N_u-B\cdot N_u\right)}{\sqrt{\left[2\cdot A\cdot B\cdot C\cdot\left(A\cdot B+A\cdot N_u-B\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{B^2\cdot C^2\cdot\left[N_u{}^2\cdot(A-B)-A^3+A^2\cdot B+2\cdot A\cdot B\cdot N_u\right]^2+A^2\cdot N_u{}^2\cdot(A-B)^2\cdot\left(B\cdot A-A^2+B\cdot N_u\right)^2\ \ldots}\ \ldots\right]\cdot\sqrt{A^2\cdot B^2\cdot C^2\cdot\left(A\cdot B+A\cdot N_u-B\cdot N_u\right)^2}}{A\cdot B\cdot C\cdot\sqrt{\left[\sqrt{B^2\cdot C^2\cdot\left[N_u{}^2\cdot(A-B)-A^3+A^2\cdot B+2\cdot A\cdot B\cdot N_u\right]^2+A^2\cdot N_u{}^2\cdot(A-B)^2\cdot\left(B\cdot A-A^2+B\cdot N_u\right)^2\ \ldots}\ \ldots\right]^2}\cdot\left(A\cdot B\ \ A\cdot N_u\ \ -B\cdot N_u\right)}=0$$

4RST8B1R11



$N_1 = 1.76022$

$N_2 = 1.42122$

$N_3 = 0.92228$

$R = 2.28316$

Unit. $AB := 1$ **Given.** $N_1 := 1.76022$ $N_2 := 1.42122$ $N_3 := .92228$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u^2 \cdot (A - C) \cdot \left(A^2 - B \cdot A - B \cdot N_u\right)}{A \cdot C^2 \cdot \left[A \cdot B + N_u \cdot (A - B)\right]} = 2.283148$$

$$Num := \frac{B \cdot (A - B)}{\sqrt{[B \cdot (A - B)]^2}}$$

$$Den := \frac{A \cdot C^2 \cdot \left[A \cdot B + N_u \cdot (A - B)\right]}{\sqrt{\left[A \cdot C^2 \cdot \left[A \cdot B + N_u \cdot (A - B)\right]\right]^2}}$$

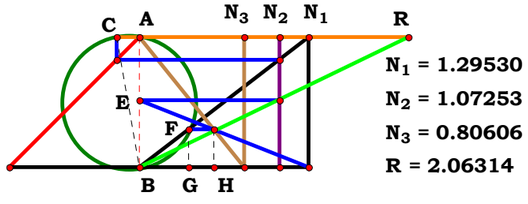
$$L := \frac{Num}{Den}$$

$Num = -1$ $Den = 1$ $L = -1$

$$L - \frac{Num}{Den} = 0$$

$$\frac{Num}{Den}$$

4RST8B1R12



$N_1 = 1.29530$

$N_2 = 1.07253$

$N_3 = 0.80606$

$R = 2.06314$

Unit. $AB := 1$ **Given.** $N_1 := 1.29530$ $N_2 := 1.07253$ $N_3 := .80606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u^2 \cdot A^2 \cdot (A - B) - N_u^3 \cdot B \cdot (A - C) + A^2 \cdot B \cdot C \cdot N_u}{A \cdot B \cdot C \cdot \left[A \cdot B + N_u \cdot (A - B)\right]} = 2.063124$$

$$Num := \frac{N_u^2 \cdot A^2 \cdot (A - B) - N_u^3 \cdot B \cdot (A - C) + A^2 \cdot B \cdot C \cdot N_u}{\sqrt{\left[N_u^2 \cdot A^2 \cdot (A - B) - N_u^3 \cdot B \cdot (A - C) + A^2 \cdot B \cdot C \cdot N_u\right]^2}}$$

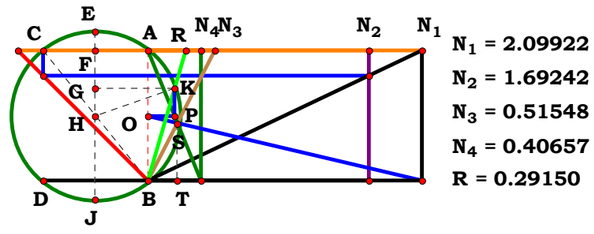
$$Den := \frac{A \cdot B \cdot C \cdot \left[A \cdot B + N_u \cdot (A - B)\right]}{\sqrt{\left[A \cdot B \cdot C \cdot \left[A \cdot B + N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num $= 1$ **Den** $= 1$ **L** $= 1$

$$L - \frac{\left[A^2 \cdot N_u^2 \cdot (A - B) - B \cdot N_u^3 \cdot (A - C) + A^2 \cdot B \cdot C \cdot N_u\right] \cdot \sqrt{A^2 \cdot B^2 \cdot C^2 \cdot \left[A \cdot B + N_u \cdot (A - B)\right]^2}}{A \cdot B \cdot C \cdot \left[A \cdot B + N_u \cdot (A - B)\right] \cdot \sqrt{\left[A^2 \cdot N_u^2 \cdot (A - B) - B \cdot N_u^3 \cdot (A - C) + A^2 \cdot B \cdot C \cdot N_u\right]^2}} = 0$$

4RST8B2R0



$N_1 = 2.09922$
$N_2 = 1.69242$
$N_3 = 0.51548$
$N_4 = 0.40657$
$R = 0.29150$

Unit. $AB := 1$ Given. $N_1 := 2.09922$ $N_2 := 1.69242$ $N_3 := .51548$

$N_4 := .40657$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(A-D)\cdot\sqrt{A\cdot B}}{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{A}\cdot\sqrt{N_u\cdot\left[B\cdot D^2\cdot(C-A+D)^2-4\cdot B\cdot N_u{}^2\cdot(A-D)^2+4\cdot A\cdot D\cdot N_u\cdot(A-D)\cdot(C-A+D)\right]}}=0.291496$$

$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(A-D)\cdot\sqrt{A\cdot B}}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^3\cdot(A-D)\cdot\sqrt{A\cdot B}\right]^2}}$$

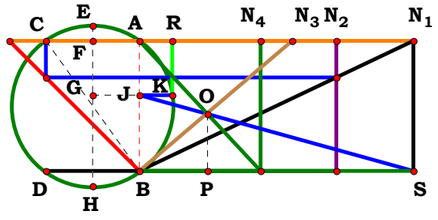
$$Den := \frac{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{A}\cdot\sqrt{N_u\cdot\left[B\cdot D^2\cdot(C-A+D)^2-4\cdot B\cdot N_u{}^2\cdot(A-D)^2+4\cdot A\cdot D\cdot N_u\cdot(A-D)\cdot(C-A+D)\right]}}{\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{A}\cdot\sqrt{N_u\cdot\left[B\cdot D^2\cdot(C-A+D)^2-4\cdot B\cdot N_u{}^2\cdot(A-D)^2+4\cdot A\cdot D\cdot N_u\cdot(A-D)\cdot(C-A+D)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L-\frac{N_u{}^{\frac{3}{2}}\cdot\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{A}\cdot\sqrt{N_u\cdot\left[B\cdot D^2\cdot(C-A+D)^2-4\cdot B\cdot N_u{}^2\cdot(A-D)^2+4\cdot A\cdot D\cdot N_u\cdot(A-D)\cdot(C-A+D)\right]}\right]^2}\cdot\sqrt{A\cdot B}\cdot(A-D)}{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{A}\cdot\sqrt{N_u\cdot\left[B\cdot D^2\cdot(C-A+D)^2-4\cdot B\cdot N_u{}^2\cdot(A-D)^2+4\cdot A\cdot D\cdot N_u\cdot(A-D)\cdot(C-A+D)\right]}\right]\cdot\sqrt{A\cdot B\cdot N_u{}^3\cdot(A-D)^2}}=0$$

4RST8B2R1



$N_1 = 2.09922$
$N_2 = 1.50839$
$N_3 = 1.17412$
$N_4 = 0.92961$
$R = 0.25025$

Unit. $AB := 1$ **Given.** $N_1 := 2.09922$ $N_2 := 1.50839$ $N_3 := 1.17412$

$N_4 := .92961$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A\cdot(C-A+D)-\sqrt{A^2\cdot C^2-2\cdot C\cdot\left(A^2+2\cdot B^2\right)\cdot(A-D)+A^2\cdot(A-D)^2}}{2\cdot B\cdot(A-C-D)} = 0.250248$$

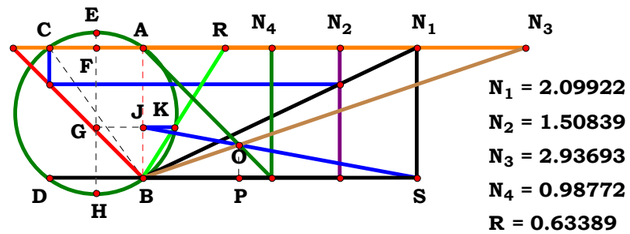
$$Num := \frac{A\cdot(C-A+D)-\sqrt{A^2\cdot C^2-2\cdot C\cdot\left(A^2+2\cdot B^2\right)\cdot(A-D)+A^2\cdot(A-D)^2}}{\sqrt{\left[A\cdot(C-A+D)-\sqrt{A^2\cdot C^2-2\cdot C\cdot\left(A^2+2\cdot B^2\right)\cdot(A-D)+A^2\cdot(A-D)^2}\right]^2}}$$

$$Den := \frac{2\cdot B\cdot(A-C-D)}{\sqrt{[2\cdot B\cdot(A-C-D)]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{\left[\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot\left(A^2+2\cdot B^2\right)\cdot(A-D)}-A\cdot(C-A+D)\right]\cdot\sqrt{B^2\cdot(C-A+D)^2}}{B\cdot\sqrt{\left[\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot\left(A^2+2\cdot B^2\right)\cdot(A-D)}-A\cdot(C-A+D)\right]^2}\cdot(C-A+D)} = 0$$



$N_1 = 2.09922$
$N_2 = 1.50839$
$N_3 = 2.93693$
$N_4 = 0.98772$
$R = 0.63389$

Unit. $AB := 1$ **Given.** $N_1 := 2.09922$ $N_2 := 1.50839$ $N_3 := 2.93693$

$N_4 := .98772$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{A\cdot(A-C-D)+\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot\left(A^2+2\cdot B^2\right)\cdot(A-D)}}{2\cdot B\cdot C}=0.633886$$

$$Num := \frac{A\cdot(A-C-D)+\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot\left(A^2+2\cdot B^2\right)\cdot(A-D)}}{\sqrt{\left[A\cdot(A-C-D)+\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot\left(A^2+2\cdot B^2\right)\cdot(A-D)}\right]^2}}$$

$$Den := \frac{2\cdot B\cdot C}{\sqrt{(2\cdot B\cdot C)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{B^2\cdot C^2}\cdot\left[\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot\left(A^2+2\cdot B^2\right)\cdot(A-D)}-A\cdot(C-A+D)\right]}{B\cdot C\cdot\sqrt{\left[\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot\left(A^2+2\cdot B^2\right)\cdot(A-D)}-A\cdot(C-A+D)\right]^2}}=0$$

4RST8AB2R5

Unit.

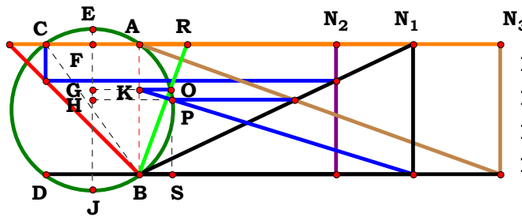
$AB := 1$

Given.

$N_1 := 2.09922$

$N_2 := 1.50839$

$N_3 := 2.77227$



$N_1 = 2.09922$
$N_2 = 1.50839$
$N_3 = 2.77227$
$R = 0.36889$

Descriptions.

$AC := \frac{N_2}{N_1}$ $\quad EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $\quad EF := \frac{EJ - AB}{2}$

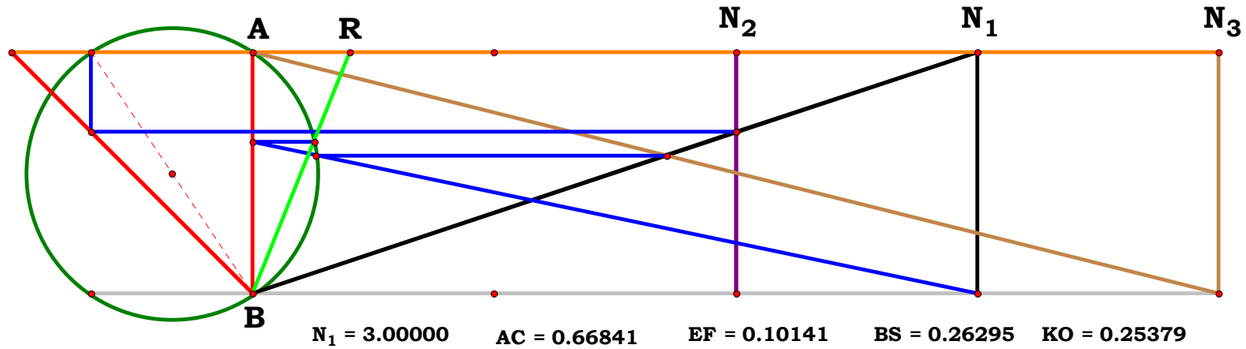
$PS := \frac{N_3}{N_1 + N_3}$ $\quad HJ := PS + EF$

$HP := \sqrt{HJ \cdot (EJ - HJ)}$ $\quad BS := HP - AF$

$BK := \frac{PS \cdot N_1}{N_1 - BS}$ $\quad GJ := BK + EF$

$GO := \sqrt{GJ \cdot (EJ - GJ)}$ $\quad KO := GO - AF$

$R := \frac{KO}{BK}$ $\quad R = 0.368893$



$N_1 = 3.00000$ $\quad AC = 0.66841$ $\quad EF = 0.10141$ $\quad BS = 0.26295$ $\quad KO = 0.25379$

$N_2 = 2.00523$ $\quad AB = 1.00000$ $\quad PS = 0.57143$ $\quad BK = 0.62633$ $\quad R - \frac{KO}{BK} = 0.00000$

$N_3 = 4.00000$ $\quad EJ = 1.20282$ $\quad HJ = 0.67284$ $\quad GJ = 0.72773$

$R = 0.40520$ $\quad AF = 0.33420$ $\quad HP = 0.59715$ $\quad GO = 0.58799$

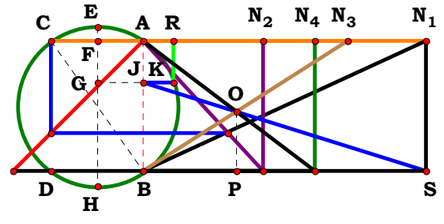
Definitions.

$A := \sqrt{AC^2 \cdot (N_1 + N_3)^2 + 4 \cdot N_1 \cdot N_3}$ $\quad B := \sqrt{(N_1 + N_3)^2}$ $\quad C := \sqrt{(N_1 + N_3)^2 \cdot [A - B \cdot (AC + 2 \cdot N_1)]^2}$

$D := \sqrt{AC^2 \cdot (N_1 + N_3)^2 \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)^2 - 8 \cdot B \cdot N_1 \cdot N_3 \cdot [(N_1 + N_3) \cdot (A - AC \cdot B) - 2 \cdot B \cdot N_1^2]}$

$R - \frac{(AC \cdot C - D) \cdot (N_1 + N_3) \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)}{4 \cdot B \cdot C \cdot N_1 \cdot N_3} = 0$

4RST8B3R1



$N_1 = 2.16702$
$N_2 = 0.91756$
$N_3 = 1.57123$
$N_4 = 1.31704$
$R = 0.23230$

Unit. $AB := 1$ Given. $N_1 := 2.16702$ $N_2 := .91756$ $N_3 := 1.57123$

$N_4 := 1.31704$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

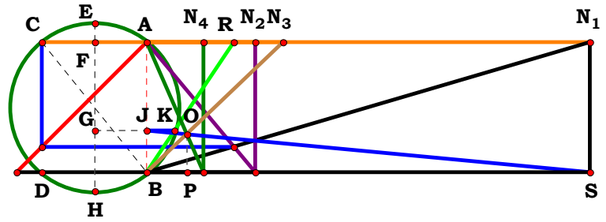
$$\frac{\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}+B\cdot(A-C-D)}{(A+B)\cdot(2\cdot C-2\cdot A+2\cdot D)} = 0.232295$$

$$Num := \frac{\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}+B\cdot(A-C-D)}{\sqrt{\left[\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}+B\cdot(A-C-D)\right]^2}}$$

$$Den := \frac{(A+B)\cdot(2\cdot C-2\cdot A+2\cdot D)}{\sqrt{[(A+B)\cdot(2\cdot C-2\cdot A+2\cdot D)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{(A+B)^2\cdot(2\cdot C-2\cdot A+2\cdot D)^2}\cdot\left[\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C-A+D)\right]}{\sqrt{\left[\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C-A+D)\right]^2}\cdot(A+B)\cdot(2\cdot C-2\cdot A+2\cdot D)} = 0$$



$N_1 = 3.39712$
$N_2 = 0.83038$
$N_3 = 1.04820$
$N_4 = 0.43563$
$R = 0.66502$

Unit. $AB := 1$ **Given.** $N_1 := 3.39712$ $N_2 := .83038$ $N_3 := 1.04820$ $N_4 := .43563$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}+B\cdot(A-C-D)}{2\cdot C\cdot(A+B)} = 0.665024$$

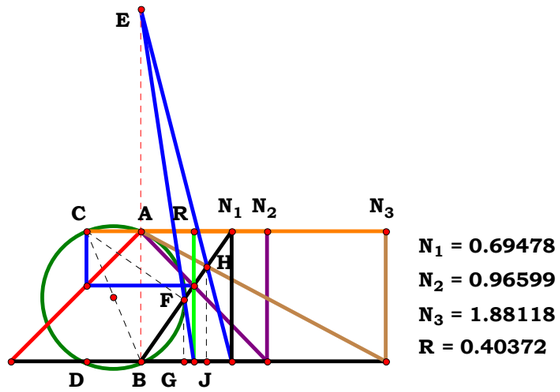
$$Num := \frac{\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}+B\cdot(A-C-D)}{\sqrt{\left[\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}+B\cdot(A-C-D)\right]^2}}$$

$$Den := \frac{2\cdot C\cdot(A+B)}{\sqrt{[2\cdot C\cdot(A+B)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{C^2\cdot(A+B)^2}\cdot\left[\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C-A+D)\right]}{C\cdot\sqrt{\left[\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)}-B\cdot(C-A+D)\right]^2}\cdot(A+B)} = 0$$

4RST8AB3R4



Unit. $AB := 1$ **Given.** $N_1 := .69478$ $N_2 := .96599$ $N_3 := 1.88118$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)}{(A+B) \cdot {N_u}^2 + B \cdot C \cdot N_u + A \cdot (A-C) \cdot (A+B)} = 0.403719$$

$$Num := \frac{N_u \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)}{\sqrt{\left[N_u \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)\right]^2}}$$

$$Den := \frac{(A+B) \cdot {N_u}^2 + B \cdot C \cdot N_u + A \cdot (A-C) \cdot (A+B)}{\sqrt{\left[(A+B) \cdot {N_u}^2 + B \cdot C \cdot N_u + A \cdot (A-C) \cdot (A+B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{N_u \cdot \sqrt{\left[(A+B) \cdot {N_u}^2 + B \cdot C \cdot N_u + A \cdot (A+B) \cdot (A-C)\right]^2} \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)}{\sqrt{{N_u}^2 \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)^2} \cdot \left[(A+B) \cdot {N_u}^2 + B \cdot C \cdot N_u + A \cdot (A+B) \cdot (A-C)\right]} = 0$$

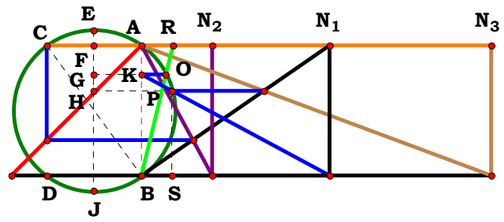
4RST8AB3R5

Unit.

$AB := 1$

Given.

$N_1 := 1.44059$ $N_2 := .53981$ $N_3 := 2.68510$



$N_1 = 1.44059$
$N_2 = 0.53981$
$N_3 = 2.68510$
$R = 0.24210$

Descriptions.

$$AC := \frac{N_1}{N_1 + N_2} \qquad EJ := \sqrt{AB^2 + AC^2}$$

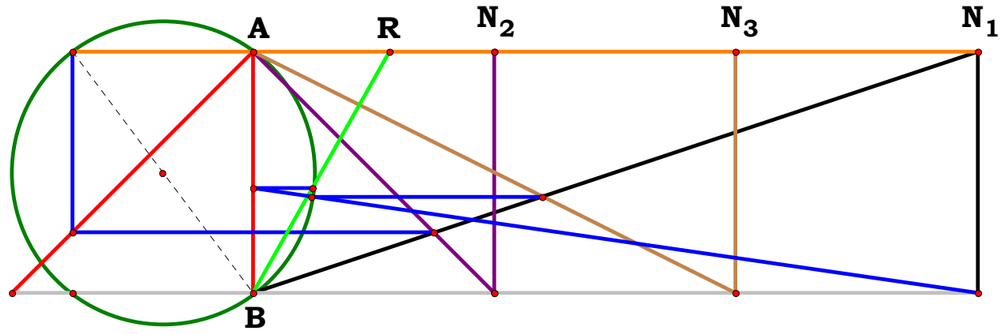
$$AF := \frac{AC}{2} \qquad EF := \frac{EJ - AB}{2}$$

$$PS := \frac{N_3}{N_1 + N_3} \qquad HJ := PS + EF$$

$$HP := \sqrt{HJ \cdot (EJ - HJ)} \qquad BS := HP - AF$$

$$BK := \frac{PS \cdot N_1}{N_1 - BS} \qquad GJ := BK + EF$$

$$GO := \sqrt{GJ \cdot (EJ - GJ)} \qquad KO := GO - AF$$



$N_1 = 3.00000$	$AB = 1.00000$	$EF = 0.12500$	$BS = 0.24195$	$KO = 0.24662$
$N_2 = 1.00000$	$AC = 0.75000$	$PS = 0.40000$	$BK = 0.43509$	KO
$N_3 = 2.00000$	$EJ = 1.25000$	$HJ = 0.52500$	$GJ = 0.56009$	$R - \frac{KO}{BK} = 0.00000$
$R = 0.56683$	$AF = 0.37500$	$HP = 0.61695$	$GO = 0.62162$	

$$R := \frac{KO}{BK} \qquad R = 0.242104$$

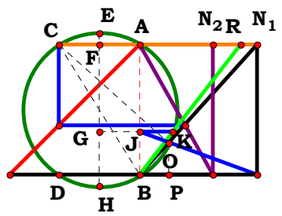
Definitions.

$$A := \sqrt{AC^2 \cdot (N_1 + N_3)^2 + 4 \cdot N_1 \cdot N_3} \qquad B := \sqrt{(N_1 + N_3)^2} \qquad C := \sqrt{(N_1 + N_3)^2 \cdot [A - B \cdot (AC + 2 \cdot N_1)]^2}$$

$$D := \sqrt{AC^2 \cdot (N_1 + N_3)^2 \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)^2 - 8 \cdot B \cdot N_1 \cdot N_3 \cdot [(N_1 + N_3) \cdot (A - AC \cdot B) - 2 \cdot B \cdot N_1^2]}$$

$$R - \frac{(AC \cdot C - D) \cdot (N_1 + N_3) \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)}{4 \cdot B \cdot C \cdot N_1 \cdot N_3} = 0$$

4RST8B3R6



$N_1 = 0.89818$

$N_2 = 0.55918$

$R = 0.77237$

Unit. $AB := 1$ Given. $N_1 := .89818$ $N_2 := .55918$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

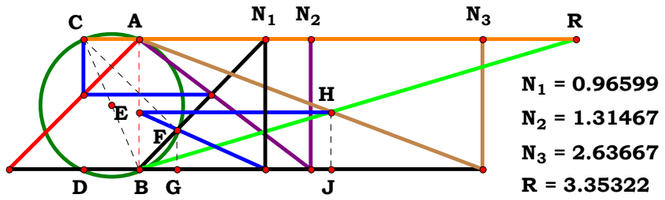
$$\frac{\sqrt{N_u^4\cdot B^2\cdot(A+B)^2-2\cdot N_u^3\cdot A\cdot B\cdot(A+B)\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)\ \ldots \\ +\ N_u^2\cdot A^2\cdot\left(2\cdot A^2+2\cdot A\cdot B-B^2\right)\cdot\left(2\cdot A^2+6\cdot A\cdot B+3\cdot B^2\right)+12\cdot N_u\cdot A^3\cdot B\cdot(A+B)^3-4\cdot A^4\cdot(A+B)^4}-B\cdot N_u\cdot\left[A\cdot B+N_u\cdot(A+B)\right]}{2\cdot A\cdot(A+B)\cdot\left(A^2+B\cdot A-B\cdot N_u\right)} = 0.772363$$

$$Num := \frac{\sqrt{N_u^4\cdot B^2\cdot(A+B)^2-2\cdot N_u^3\cdot A\cdot B\cdot(A+B)\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)\ \ldots \\ +\ N_u^2\cdot A^2\cdot\left(2\cdot A^2+2\cdot A\cdot B-B^2\right)\cdot\left(2\cdot A^2+6\cdot A\cdot B+3\cdot B^2\right)+12\cdot N_u\cdot A^3\cdot B\cdot(A+B)^3-4\cdot A^4\cdot(A+B)^4}-B\cdot N_u\cdot\left[A\cdot B+N_u\cdot(A+B)\right]}{\sqrt{\left[\sqrt{N_u^4\cdot B^2\cdot(A+B)^2-2\cdot N_u^3\cdot A\cdot B\cdot(A+B)\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)\ \ldots \\ +\ N_u^2\cdot A^2\cdot\left(2\cdot A^2+2\cdot A\cdot B-B^2\right)\cdot\left(2\cdot A^2+6\cdot A\cdot B+3\cdot B^2\right)+12\cdot N_u\cdot A^3\cdot B\cdot(A+B)^3-4\cdot A^4\cdot(A+B)^4}-B\cdot N_u\cdot\left[A\cdot B+N_u\cdot(A+B)\right]\right]^2}}$$

$$Den := \frac{2\cdot A\cdot(A+B)\cdot\left(A^2+B\cdot A-B\cdot N_u\right)}{\sqrt{\left[2\cdot A\cdot(A+B)\cdot\left(A^2+B\cdot A-B\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{B^2\cdot N_u^4\cdot(A+B)^2-4\cdot A^4\cdot(A+B)^4+12\cdot A^3\cdot B\cdot N_u\cdot(A+B)^3\ \ldots \\ +\ A^2\cdot N_u^2\cdot\left(2\cdot A^2+2\cdot A\cdot B-B^2\right)\cdot\left(2\cdot A^2+6\cdot A\cdot B+3\cdot B^2\right)-2\cdot A\cdot B\cdot N_u^3\cdot(A+B)\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)}-B\cdot N_u\cdot\left[N_u\cdot(A+B)+A\cdot B\right]\right]\cdot\sqrt{A^2\cdot(A+B)^2\cdot\left(A^2+B\cdot A-B\cdot N_u\right)^2}}{A\cdot(A+B)\cdot\sqrt{\left[\sqrt{B^2\cdot N_u^4\cdot(A+B)^2-4\cdot A^4\cdot(A+B)^4+12\cdot A^3\cdot B\cdot N_u\cdot(A+B)^3\ \ldots \\ +\ A^2\cdot N_u^2\cdot\left(2\cdot A^2+2\cdot A\cdot B-B^2\right)\cdot\left(2\cdot A^2+6\cdot A\cdot B+3\cdot B^2\right)-2\cdot A\cdot B\cdot N_u^3\cdot(A+B)\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)}-B\cdot N_u\cdot\left[N_u\cdot(A+B)+A\cdot B\right]\right]^2\cdot\left(A^2+B\cdot A-B\cdot N_u\right)}} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := .96599$ $N_2 := 1.31467$ $N_3 := 2.63667$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

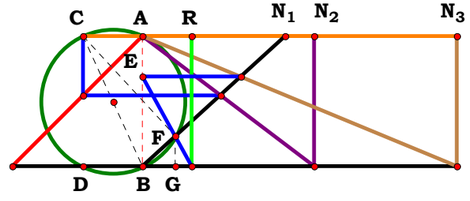
$$\frac{N_u \cdot \left[A \cdot \left(N_u^2 - B \cdot A - A^2\right) + B \cdot N_u \cdot \left(2 \cdot A + N_u\right)\right]}{A \cdot C \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)} = 3.353318$$

$$Num := \frac{N_u \cdot \left[A \cdot \left(N_u^2 - B \cdot A - A^2\right) + B \cdot N_u \cdot \left(2 \cdot A + N_u\right)\right]}{\sqrt{\left[N_u \cdot \left[A \cdot \left(N_u^2 - B \cdot A - A^2\right) + B \cdot N_u \cdot \left(2 \cdot A + N_u\right)\right]\right]^2}}$$

$$Den := \frac{A \cdot C \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)}{\sqrt{\left[A \cdot C \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot C \cdot \sqrt{N_u^2 \cdot \left[A \cdot \left(N_u^2 - B \cdot A - A^2\right) + B \cdot N_u \cdot \left(2 \cdot A + N_u\right)\right]^2} \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)}{N_u \cdot \left[A \cdot \left(N_u^2 - B \cdot A - A^2\right) + B \cdot N_u \cdot \left(2 \cdot A + N_u\right)\right] \cdot \sqrt{A^2 \cdot C^2 \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)^2}} = 0$$



$N_1 = 1.09190$
$N_2 = 1.31467$
$N_3 = 2.41390$
$R = 0.37752$

Unit. $AB := 1$ Given. $N_1 := 1.09190$ $N_2 := 1.31467$ $N_3 := 2.41390$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left[A^2 + B \cdot (A - N_u)\right]}{N_u^2 \cdot (A + B) + N_u \cdot B \cdot (A + C) - A \cdot C \cdot (A + B)} = 0.37752$$

$$Num := \frac{N_u \cdot \left[A^2 + B \cdot (A - N_u)\right]}{\sqrt{\left[N_u \cdot \left[A^2 + B \cdot (A - N_u)\right]\right]^2}}$$

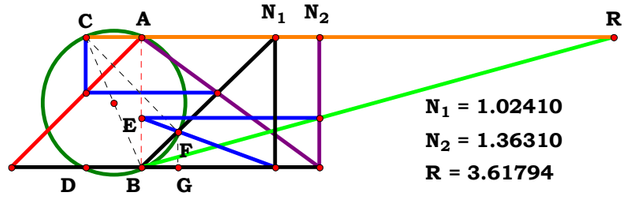
$$Den := \frac{N_u^2 \cdot (A + B) + N_u \cdot B \cdot (A + C) - A \cdot C \cdot (A + B)}{\sqrt{\left[N_u^2 \cdot (A + B) + N_u \cdot B \cdot (A + C) - A \cdot C \cdot (A + B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[(A + B) \cdot N_u^2 + B \cdot (A + C) \cdot N_u - A \cdot C \cdot (A + B)\right]^2} \cdot \left[A^2 + B \cdot (A - N_u)\right]}{\sqrt{N_u^2 \cdot \left[A^2 + B \cdot (A - N_u)\right]^2} \cdot \left[(A + B) \cdot N_u^2 + B \cdot (A + C) \cdot N_u - A \cdot C \cdot (A + B)\right]} = 0$$

4RST8B3R9



Unit. $AB := 1$ **Given.** $N_1 := 1.02410$ $N_2 := 1.36310$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u^2 \cdot [A \cdot B + N_u \cdot (A + B)]}{A \cdot B \cdot (A^2 + B \cdot A - B \cdot N_u)} = 3.617938$$

$$Num := \frac{N_u^2 \cdot [A \cdot B + N_u \cdot (A + B)]}{\sqrt{[N_u^2 \cdot [A \cdot B + N_u \cdot (A + B)]]^2}}$$

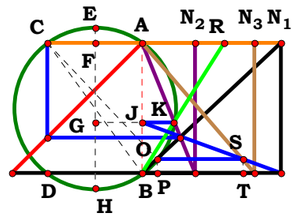
$$Den := \frac{A \cdot B \cdot (A^2 + B \cdot A - B \cdot N_u)}{\sqrt{[A \cdot B \cdot (A^2 + B \cdot A - B \cdot N_u)]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot [N_u \cdot (A + B) + A \cdot B] \cdot \sqrt{A^2 \cdot B^2 \cdot (A^2 + B \cdot A - B \cdot N_u)^2}}{A \cdot B \cdot \sqrt{N_u^4 \cdot [N_u \cdot (A + B) + A \cdot B]^2} \cdot (A^2 + B \cdot A - B \cdot N_u)} = 0$$

4RST8B3R10



$N_1 = 1.06284$
$N_2 = 0.40421$
$N_3 = 0.86417$
$R = 0.62545$

Unit. $AB := 1$ **Given.** $N_1 := 1.06284$ $N_2 := .40421$ $N_3 := .86417$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{C^2\cdot(A+B)^2\cdot\left[2\cdot N_u\cdot A\cdot(A+B)+A^2\cdot B-B\cdot {N_u}^2\right]^2+A^2\cdot B^2\cdot {N_u}^2\cdot\left(A\cdot B+A\cdot N_u+B\cdot N_u\right)^2\ \ldots \\ +\ -2\cdot C\cdot A\cdot N_u\cdot(A+B)\cdot\left[A\cdot B+N_u\cdot(A+B)\right]\cdot\left[B^2\cdot {N_u}^2-2\cdot N_u\cdot A\cdot B\cdot(A+B)+A^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)\right]}+\left[{N_u}^2\cdot B\cdot(A-C)\cdot(A+B)+A^2\cdot B^2\cdot N_u-A^2\cdot B\cdot C\cdot(A+B)\right]}{2\cdot A\cdot C\cdot(A+B)\cdot\left(A^2+B\cdot A-B\cdot N_u\right)} = 0.625446$$

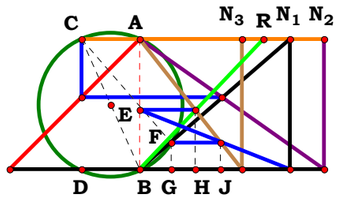
$$\mathrm{Num} := \frac{\sqrt{C^2\cdot(A+B)^2\cdot\left[2\cdot N_u\cdot A\cdot(A+B)+A^2\cdot B-B\cdot {N_u}^2\right]^2+A^2\cdot B^2\cdot {N_u}^2\cdot\left(A\cdot B+A\cdot N_u+B\cdot N_u\right)^2\ \ldots \\ +\ -2\cdot C\cdot A\cdot N_u\cdot(A+B)\cdot\left[A\cdot B+N_u\cdot(A+B)\right]\cdot\left[B^2\cdot {N_u}^2-2\cdot N_u\cdot A\cdot B\cdot(A+B)+A^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)\right]}+\left[{N_u}^2\cdot B\cdot(A-C)\cdot(A+B)+A^2\cdot B^2\cdot N_u-A^2\cdot B\cdot C\cdot(A+B)\right]}{\sqrt{\left[\sqrt{C^2\cdot(A+B)^2\cdot\left[2\cdot N_u\cdot A\cdot(A+B)+A^2\cdot B-B\cdot {N_u}^2\right]^2+A^2\cdot B^2\cdot {N_u}^2\cdot\left(A\cdot B+A\cdot N_u+B\cdot N_u\right)^2\ \ldots \\ +\ -2\cdot C\cdot A\cdot N_u\cdot(A+B)\cdot\left[A\cdot B+N_u\cdot(A+B)\right]\cdot\left[B^2\cdot {N_u}^2-2\cdot N_u\cdot A\cdot B\cdot(A+B)+A^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)\right]}+\left[{N_u}^2\cdot B\cdot(A-C)\cdot(A+B)+A^2\cdot B^2\cdot N_u-A^2\cdot B\cdot C\cdot(A+B)\right]\right]^2}}$$

$$\mathrm{Den} := \frac{2\cdot A\cdot C\cdot(A+B)\cdot\left(A^2+B\cdot A-B\cdot N_u\right)}{\sqrt{\left[2\cdot A\cdot C\cdot(A+B)\cdot\left(A^2+B\cdot A-B\cdot N_u\right)\right]^2}} \qquad L := \frac{\mathrm{Num}}{\mathrm{Den}}$$

$\mathrm{Num} = 1$ $\mathrm{Den} = 1$ $L = 1$

$$L-\frac{\left[\sqrt{C^2\cdot(A+B)^2\cdot\left[A^2\cdot B-B\cdot {N_u}^2+2\cdot A\cdot N_u\cdot(A+B)\right]^2+A^2\cdot B^2\cdot {N_u}^2\cdot\left(A\cdot B+A\cdot N_u+B\cdot N_u\right)^2\ \ldots \\ +\ -2\cdot A\cdot C\cdot N_u\cdot(A+B)\cdot\left[N_u\cdot(A+B)+A\cdot B\right]\cdot\left[A^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)+B^2\cdot {N_u}^2-2\cdot A\cdot B\cdot N_u\cdot(A+B)\right] \\ +\ A^2\cdot B^2\cdot N_u-A^2\cdot B\cdot C\cdot(A+B)+B\cdot {N_u}^2\cdot(A+B)\cdot(A-C)}\ \ldots\right]\cdot\sqrt{A^2\cdot C^2\cdot(A+B)^2\cdot\left(A^2+B\cdot A-B\cdot N_u\right)^2}}{A\cdot C\cdot(A+B)\cdot\left[\sqrt{C^2\cdot(A+B)^2\cdot\left[A^2\cdot B-B\cdot {N_u}^2+2\cdot A\cdot N_u\cdot(A+B)\right]^2+A^2\cdot B^2\cdot {N_u}^2\cdot\left(A\cdot B+A\cdot N_u+B\cdot N_u\right)^2\ \ldots \\ +\ -2\cdot A\cdot C\cdot N_u\cdot(A+B)\cdot\left[N_u\cdot(A+B)+A\cdot B\right]\cdot\left[A^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+3\cdot B^2\right)+B^2\cdot {N_u}^2-2\cdot A\cdot B\cdot N_u\cdot(A+B)\right] \\ +\ A^2\cdot B^2\cdot N_u-A^2\cdot B\cdot C\cdot(A+B)+B\cdot {N_u}^2\cdot(A+B)\cdot(A-C)}\ \ldots\right]^2\cdot\left(A^2+B\cdot A-B\cdot N_u\right)} = 0$$

4RST8B3R11



$N_1 = 1.15002$
$N_2 = 1.41153$
$N_3 = 0.78668$
$R = 0.94487$

Unit. $AB := 1$ **Given.** $N_1 := 1.15002$ $N_2 := 1.41153$ $N_3 := .78668$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u^2 \cdot (C - A) \cdot \left[A \cdot B + N_u \cdot (A + B)\right]}{A \cdot C^2 \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)} = 0.944894$$

$$Num := \frac{N_u^2 \cdot (C - A) \cdot \left[A \cdot B + N_u \cdot (A + B)\right]}{\sqrt{\left[N_u^2 \cdot (C - A) \cdot \left[A \cdot B + N_u \cdot (A + B)\right]\right]^2}}$$

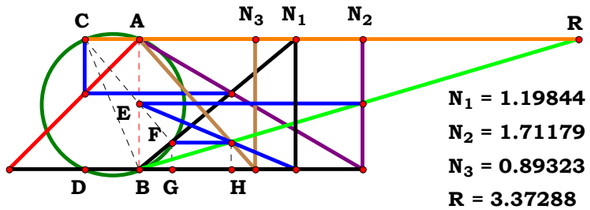
$$Den := \frac{A \cdot C^2 \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)}{\sqrt{\left[A \cdot C^2 \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \left[N_u \cdot (A + B) + A \cdot B\right] \cdot (C - A) \cdot \sqrt{A^2 \cdot C^4 \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)^2}}{A \cdot C^2 \cdot \sqrt{N_u^4 \cdot \left[N_u \cdot (A + B) + A \cdot B\right]^2 \cdot (A - C)^2} \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)} = 0$$

4RST8B3R12



$N_1 = 1.19844$
$N_2 = 1.71179$
$N_3 = 0.89323$
$R = 3.37288$

Unit. $AB := 1$ **Given.** $N_1 := 1.19844$ $N_2 := 1.71179$ $N_3 := .89323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

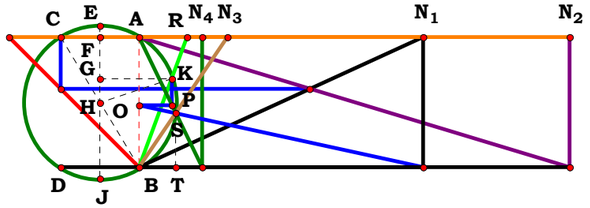
$$\frac{N_u \cdot A^2 \cdot C \cdot (A+B) - N_u{}^3 \cdot (A-C) \cdot (A+B) - A^2 \cdot B \cdot N_u{}^2}{A \cdot B \cdot C \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)} = 3.372825$$

$$Num := \frac{N_u \cdot A^2 \cdot C \cdot (A+B) - N_u{}^3 \cdot (A-C) \cdot (A+B) - A^2 \cdot B \cdot N_u{}^2}{\sqrt{\left[N_u \cdot A^2 \cdot C \cdot (A+B) - N_u{}^3 \cdot (A-C) \cdot (A+B) - A^2 \cdot B \cdot N_u{}^2\right]^2}}$$

$$Den := \frac{A \cdot B \cdot C \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)}{\sqrt{\left[A \cdot B \cdot C \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[N_u \cdot A^2 \cdot C \cdot (A+B) - N_u{}^3 \cdot (A-C) \cdot (A+B) - A^2 \cdot B \cdot N_u{}^2\right] \cdot \sqrt{A^2 \cdot B^2 \cdot C^2 \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)^2}}{A \cdot B \cdot C \cdot \sqrt{\left[N_u \cdot A^2 \cdot C \cdot (A+B) - N_u{}^3 \cdot (A-C) \cdot (A+B) - A^2 \cdot B \cdot N_u{}^2\right]^2} \cdot \left(A^2 + B \cdot A - B \cdot N_u\right)} = 0$$



$N_1 = 2.17671$
$N_2 = 3.30026$
$N_3 = 0.68014$
$N_4 = 0.48406$
$R = 0.36955$

Unit. $AB := 1$ **Given.** $N_1 := 2.17671$ $N_2 := 3.30026$ $N_3 := .68014$ $N_4 := .48406$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2 \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot (A-D)}{\sqrt{A \cdot N_u + B \cdot N_u} \cdot D \cdot (A-C-D) - \sqrt{N_u \cdot \left[D^2 \cdot (A+B) \cdot (C-A+D)^2 - 4 \cdot {N_u}^2 \cdot (A+B) \cdot (A-D)^2 + 4 \cdot A \cdot D \cdot N_u \cdot (A-D) \cdot (C-A+D)\right]}} = 0.369547$$

$$Num := \frac{2 \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot (A-D)}{\sqrt{\left[2 \cdot N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot (A-D)\right]^2}}$$

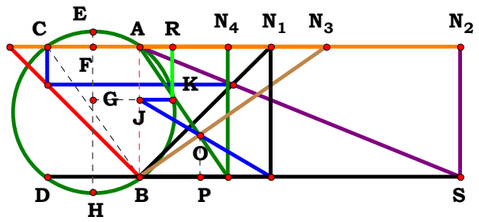
$$Den := \frac{\sqrt{A \cdot N_u + B \cdot N_u} \cdot D \cdot (A-C-D) - \sqrt{N_u \cdot \left[D^2 \cdot (A+B) \cdot (C-A+D)^2 - 4 \cdot {N_u}^2 \cdot (A+B) \cdot (A-D)^2 + 4 \cdot A \cdot D \cdot N_u \cdot (A-D) \cdot (C-A+D)\right]}}{\sqrt{\left[\sqrt{A \cdot N_u + B \cdot N_u} \cdot D \cdot (A-C-D) - \sqrt{N_u \cdot \left[D^2 \cdot (A+B) \cdot (C-A+D)^2 - 4 \cdot {N_u}^2 \cdot (A+B) \cdot (A-D)^2 + 4 \cdot A \cdot D \cdot N_u \cdot (A-D) \cdot (C-A+D)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{N_u \cdot (A+B)} \cdot (A-D) \cdot \sqrt{\left[\sqrt{N_u \cdot \left[D^2 \cdot (A+B) \cdot (C-A+D)^2 - 4 \cdot {N_u}^2 \cdot (A+B) \cdot (A-D)^2 + 4 \cdot A \cdot D \cdot N_u \cdot (A-D) \cdot (C-A+D)\right]} + D \cdot \sqrt{A \cdot N_u + B \cdot N_u} \cdot (C-A+D)\right]^2}}{\left[\sqrt{A \cdot N_u + B \cdot N_u} \cdot D \cdot (A-C-D) - \sqrt{N_u \cdot \left[D^2 \cdot (A+B) \cdot (C-A+D)^2 - 4 \cdot {N_u}^2 \cdot (A+B) \cdot (A-D)^2 + 4 \cdot A \cdot D \cdot N_u \cdot (A-D) \cdot (C-A+D)\right]}\right] \cdot \sqrt{{N_u}^3 \cdot (A+B) \cdot (A-D)^2}} = 0$$

4RST8B4R1



$N_1 = 1.00473$
$N_2 = 2.45760$
$N_3 = 1.43563$
$N_4 = 0.67778$
$R = 0.25131$

Unit. $AB := 1$ Given. $N_1 := 1.00473$ $N_2 := 2.45760$ $N_3 := 1.43563$

$N_4 := .67778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

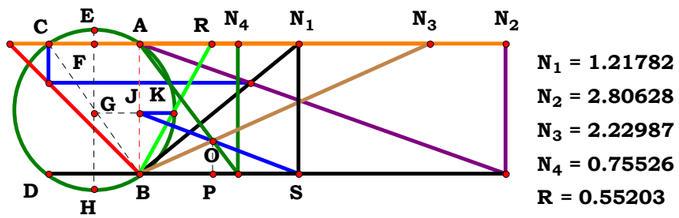
$$\frac{A\cdot(C-A+D)-\sqrt{A^2\cdot C^2-2\cdot C\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)\cdot(A-D)+A^2\cdot(A-D)^2}}{2\cdot(A-C-D)\cdot(A+B)} = 0.251311$$

$$Num := \frac{A\cdot(C-A+D)-\sqrt{A^2\cdot C^2-2\cdot C\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)\cdot(A-D)+A^2\cdot(A-D)^2}}{\sqrt{\left[A\cdot(C-A+D)-\sqrt{A^2\cdot C^2-2\cdot C\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)\cdot(A-D)+A^2\cdot(A-D)^2}\right]^2}}$$

$$Den := \frac{2\cdot(A-C-D)\cdot(A+B)}{\sqrt{[2\cdot(A-C-D)\cdot(A+B)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{\sqrt{(A+B)^2\cdot(2\cdot C-2\cdot A+2\cdot D)^2}\cdot\left[\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot(C-A+D)\right]}{\sqrt{\left[\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot(C-A+D)\right]^2}\cdot(A+B)\cdot(2\cdot C-2\cdot A+2\cdot D)} = 0$$



Unit. $AB := 1$ Given. $N_1 := 1.21782$ $N_2 := 2.80628$ $N_3 := 2.22987$

$N_4 := .75526$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}+A\cdot(A-C-D)}{2\cdot C\cdot(A+B)} = 0.552031$$

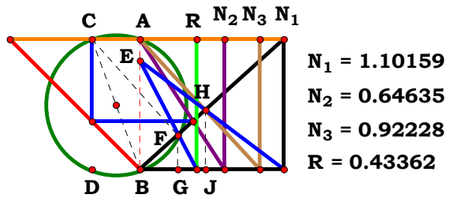
$$Num := \frac{\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}+A\cdot(A-C-D)}{\sqrt{\left[\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}+A\cdot(A-C-D)\right]^2}}$$

$$Den := \frac{2\cdot C\cdot(A+B)}{\sqrt{[2\cdot C\cdot(A+B)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{C^2\cdot(A+B)^2}\cdot\left[\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot(C-A+D)\right]}{C\cdot\sqrt{\left[\sqrt{A^2\cdot C^2+A^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot(C-A+D)\right]^2}\cdot(A+B)} = 0$$

4RST8B4R4



Unit. $AB := 1$ Given. $N_1 := 1.10159$ $N_2 := .64635$ $N_3 := .92228$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A \cdot N_u \cdot (A + B - N_u)}{\left(A^2 + {N_u}^2\right) \cdot (A + B) - C \cdot A \cdot (A + B - N_u)} = 0.433618$$

$$Num := \frac{A \cdot N_u \cdot (A + B - N_u)}{\sqrt{\left[A \cdot N_u \cdot (A + B - N_u)\right]^2}}$$

$$Den := \frac{\left(A^2 + {N_u}^2\right) \cdot (A + B) - C \cdot A \cdot (A + B - N_u)}{\sqrt{\left[\left(A^2 + {N_u}^2\right) \cdot (A + B) - C \cdot A \cdot (A + B - N_u)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{\left[\left(A^2 + {N_u}^2\right) \cdot (A + B) - A \cdot C \cdot (A + B - N_u)\right]^2} \cdot (A + B - N_u)}{\left[\left(A^2 + {N_u}^2\right) \cdot (A + B) - A \cdot C \cdot (A + B - N_u)\right] \cdot \sqrt{A^2 \cdot {N_u}^2 \cdot (A + B - N_u)^2}} = 0$$

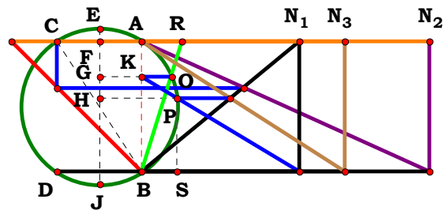
4RST8AB4R5

Unit.

$AB := 1$

Given.

$N_1 := 1.20813$ $N_2 := 2.20577$ $N_3 := 1.56155$



$N_1 = 1.20813$
$N_2 = 2.20577$
$N_3 = 1.56155$
$R = 0.31444$

Descriptions.

$AC := \frac{N_2}{N_1 + N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

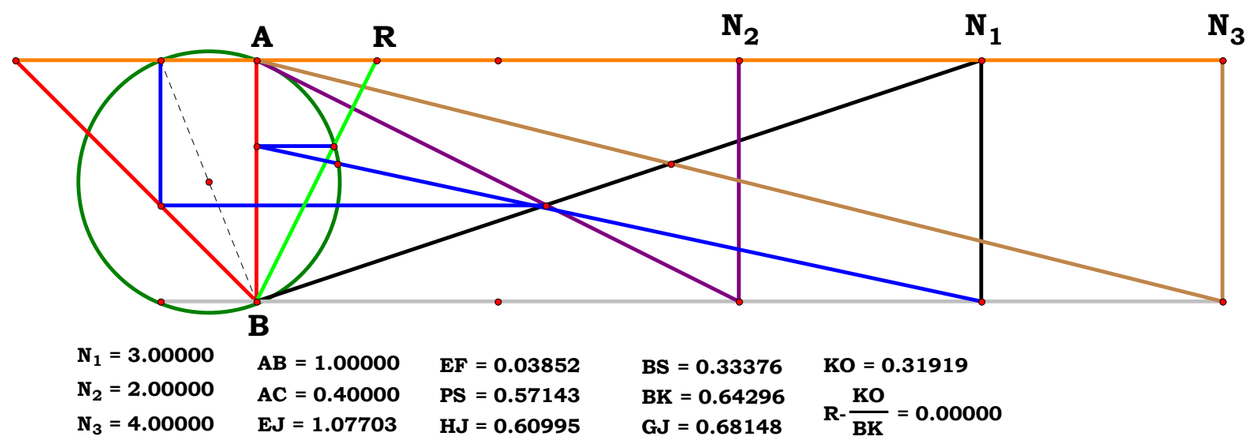
$PS := \frac{N_3}{N_1 + N_3}$ $HJ := PS + EF$

$HP := \sqrt{HJ \cdot (EJ - HJ)}$ $BS := HP - AF$

$BK := \frac{PS \cdot N_1}{N_1 - BS}$ $GJ := BK + EF$

$GO := \sqrt{GJ \cdot (EJ - GJ)}$ $KO := GO - AF$

$R := \frac{KO}{BK}$ $R = 0.314439$



$N_1 = 3.00000$ $AB = 1.00000$ $EF = 0.03852$ $BS = 0.33376$ $KO = 0.31919$

$N_2 = 2.00000$ $AC = 0.40000$ $PS = 0.57143$ $BK = 0.64296$ $R - \frac{KO}{BK} = 0.00000$

$N_3 = 4.00000$ $EJ = 1.07703$ $HJ = 0.60995$ $GJ = 0.68148$

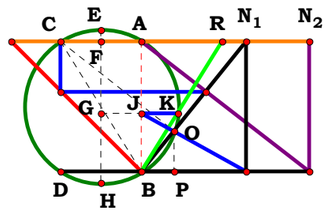
$R = 0.49645$ $AF = 0.20000$ $HP = 0.53376$ $GO = 0.51919$

Definitions.

$A := \sqrt{AC^2 \cdot (N_1 + N_3)^2 + 4 \cdot N_1 \cdot N_3}$ $B := \sqrt{(N_1 + N_3)^2}$ $C := \sqrt{(N_1 + N_3)^2 \cdot [A - B \cdot (AC + 2 \cdot N_1)]^2}$

$D := \sqrt{AC^2 \cdot (N_1 + N_3)^2 \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)^2 - 8 \cdot B \cdot N_1 \cdot N_3 \cdot [(N_1 + N_3) \cdot (A - AC \cdot B) - 2 \cdot B \cdot N_1^2]}$

$R - \frac{(AC \cdot C - D) \cdot (N_1 + N_3) \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)}{4 \cdot B \cdot C \cdot N_1 \cdot N_3} = 0$



$N_1 = 0.80133$
$N_2 = 1.28562$
$R = 0.62073$

Unit. $AB := 1$ **Given.** $N_1 := .80133$ $N_2 := 1.28562$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

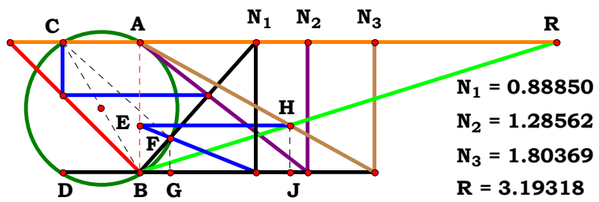
$$\frac{\sqrt{N_u^4\cdot(A+B)^2-2\cdot N_u^3\cdot(A+B)\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)+N_u^2\cdot\left(16\cdot A^2\cdot B^2-3\cdot A^4+16\cdot A\cdot B^3+4\cdot B^4\right)-4\cdot A^2\cdot(A+B)^3\cdot\left(A+B-3\cdot N_u\right)}-N_u\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)}{2\cdot A\cdot(A+B)\cdot\left(A+B-N_u\right)}=0.620735$$

$$Num := \frac{\sqrt{N_u^4\cdot(A+B)^2-2\cdot N_u^3\cdot(A+B)\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)+N_u^2\cdot\left(16\cdot A^2\cdot B^2-3\cdot A^4+16\cdot A\cdot B^3+4\cdot B^4\right)-4\cdot A^2\cdot(A+B)^3\cdot\left(A+B-3\cdot N_u\right)}-N_u\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)}{\sqrt{\left[\sqrt{N_u^4\cdot(A+B)^2-2\cdot N_u^3\cdot(A+B)\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)+N_u^2\cdot\left(16\cdot A^2\cdot B^2-3\cdot A^4+16\cdot A\cdot B^3+4\cdot B^4\right)-4\cdot A^2\cdot(A+B)^3\cdot\left(A+B-3\cdot N_u\right)}-N_u\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot(A+B)\cdot\left(A+B-N_u\right)}{\sqrt{\left[2\cdot A\cdot(A+B)\cdot\left(A+B-N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{\begin{matrix}N_u^4\cdot(A+B)^2+N_u^2\cdot\left(16\cdot A^2\cdot B^2-3\cdot A^4+16\cdot A\cdot B^3+4\cdot B^4\right)\ \ldots\\ +\ -4\cdot A^2\cdot(A+B)^3\cdot\left(A+B-3\cdot N_u\right)-2\cdot N_u^3\cdot(A+B)\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)\end{matrix}}-N_u\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)\right]\cdot\sqrt{A^2\cdot(A+B)^2\cdot\left(A+B-N_u\right)^2}}{A\cdot(A+B)\cdot\sqrt{\left[\sqrt{\begin{matrix}N_u^4\cdot(A+B)^2+N_u^2\cdot\left(16\cdot A^2\cdot B^2-3\cdot A^4+16\cdot A\cdot B^3+4\cdot B^4\right)\ \ldots\\ +\ -4\cdot A^2\cdot(A+B)^3\cdot\left(A+B-3\cdot N_u\right)-2\cdot N_u^3\cdot(A+B)\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)\end{matrix}}-N_u\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)\right]^2\cdot\left(A+B-N_u\right)}}=0$$



Unit. $AB := 1$ **Given.** $N_1 := .88850$ $N_2 := 1.28562$ $N_3 := 1.80369$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

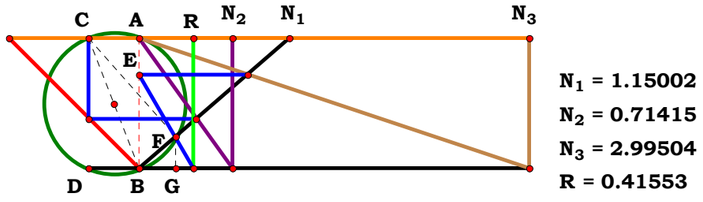
$$\frac{N_u^3 \cdot (A + B) - A^3 \cdot N_u - A^2 \cdot N_u \cdot (B - 2 \cdot N_u)}{A^2 \cdot C \cdot (A + B - N_u)} = 3.193193$$

$$Num := \frac{N_u^3 \cdot (A + B) - A^3 \cdot N_u - A^2 \cdot N_u \cdot (B - 2 \cdot N_u)}{\sqrt{\left[N_u^3 \cdot (A + B) - A^3 \cdot N_u - A^2 \cdot N_u \cdot (B - 2 \cdot N_u)\right]^2}}$$

$$Den := \frac{A^2 \cdot C \cdot (A + B - N_u)}{\sqrt{\left[A^2 \cdot C \cdot (A + B - N_u)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[N_u^3 \cdot (A + B) - A^3 \cdot N_u - A^2 \cdot N_u \cdot (B - 2 \cdot N_u)\right] \cdot \sqrt{A^4 \cdot C^2 \cdot (A + B - N_u)^2}}{A^2 \cdot C \cdot \sqrt{\left[N_u^3 \cdot (A + B) - A^3 \cdot N_u - A^2 \cdot N_u \cdot (B - 2 \cdot N_u)\right]^2} \cdot (A + B - N_u)} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 1.15002$ $N_2 := .71415$ $N_3 := 2.99504$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A \cdot N_u \cdot (A + B - N_u)}{N_u^2 \cdot (A + B) + N_u \cdot A \cdot (A + C) - A \cdot C \cdot (A + B)} = 0.415528$$

$$Num := \frac{A \cdot N_u \cdot (A + B - N_u)}{\sqrt{\left[A \cdot N_u \cdot (A + B - N_u)\right]^2}}$$

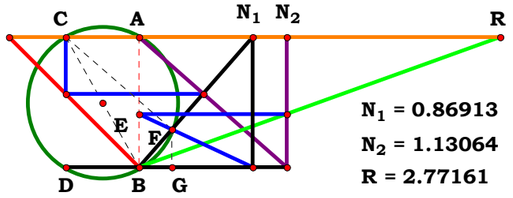
$$Den := \frac{N_u^2 \cdot (A + B) + N_u \cdot A \cdot (A + C) - A \cdot C \cdot (A + B)}{\sqrt{\left[N_u^2 \cdot (A + B) + N_u \cdot A \cdot (A + C) - A \cdot C \cdot (A + B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A \cdot N_u \cdot \sqrt{\left[(A + B) \cdot N_u^2 + A \cdot (A + C) \cdot N_u - A \cdot C \cdot (A + B)\right]^2} \cdot (A + B - N_u)}{\left[(A + B) \cdot N_u^2 + A \cdot (A + C) \cdot N_u - A \cdot C \cdot (A + B)\right] \cdot \sqrt{A^2 \cdot N_u^2 \cdot (A + B - N_u)^2}} = 0$$

4RST8B4R9



Unit. $AB := 1$ Given. $N_1 := .86913$ $N_2 := 1.13064$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u^2 \cdot \left[A^2 + N_u \cdot (A + B)\right]}{A^2 \cdot B \cdot \left(A + B - N_u\right)} = 2.771609$$

$$Num := \frac{N_u^2 \cdot \left[A^2 + N_u \cdot (A + B)\right]}{\sqrt{\left[N_u^2 \cdot \left[A^2 + N_u \cdot (A + B)\right]\right]^2}}$$

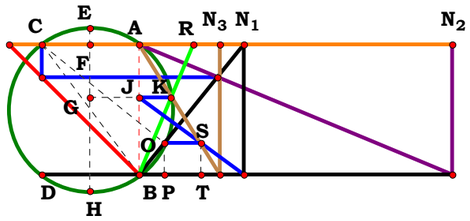
$$Den := \frac{A^2 \cdot B \cdot \left(A + B - N_u\right)}{\sqrt{\left[A^2 \cdot B \cdot \left(A + B - N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \left[N_u \cdot (A + B) + A^2\right] \cdot \sqrt{A^4 \cdot B^2 \cdot \left(A + B - N_u\right)^2}}{A^2 \cdot B \cdot \sqrt{N_u^4 \cdot \left[N_u \cdot (A + B) + A^2\right]^2} \cdot \left(A + B - N_u\right)} = 0$$

4RST8B4R10



$N_1 = 0.80133$
$N_2 = 2.39948$
$N_3 = 0.62203$
$R = 0.41332$

Unit. $AB := 1$ **Given.** $N_1 := .80133$ $N_2 := 2.39948$ $N_3 := .62203$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{C^2\cdot(A+B)^2\cdot\left[A^2+N_u\cdot\left(2\cdot A+2\cdot B-N_u\right)\right]^2+A^2\cdot {N_u}^2\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)^2\ \ldots} + \left[{N_u}^2\cdot(A-C)\cdot(A+B)+A^3\cdot N_u-\left[A^2\cdot C\cdot(A+B)\right]\right]}{+\ -2\cdot C\cdot A\cdot N_u\cdot(A+B)\cdot\left[A^2+N_u\cdot(A+B)\right]\cdot\left(3\cdot A^2+4\cdot A\cdot B-2\cdot A\cdot N_u+2\cdot B^2-2\cdot B\cdot N_u+{N_u}^2\right)}}{2\cdot A\cdot C\cdot(A+B)\cdot\left(A+B-N_u\right)} = 0.413318$$

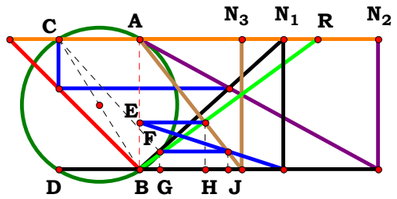
$$\mathrm{Num} := \frac{\sqrt{C^2\cdot(A+B)^2\cdot\left[A^2+N_u\cdot\left(2\cdot A+2\cdot B-N_u\right)\right]^2+A^2\cdot {N_u}^2\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)^2\ \ldots} + \left[{N_u}^2\cdot(A-C)\cdot(A+B)+A^3\cdot N_u-\left[A^2\cdot C\cdot(A+B)\right]\right]}{+\ -2\cdot C\cdot A\cdot N_u\cdot(A+B)\cdot\left[A^2+N_u\cdot(A+B)\right]\cdot\left(3\cdot A^2+4\cdot A\cdot B-2\cdot A\cdot N_u+2\cdot B^2-2\cdot B\cdot N_u+{N_u}^2\right)}}{\sqrt{\left[\sqrt{C^2\cdot(A+B)^2\cdot\left[A^2+N_u\cdot\left(2\cdot A+2\cdot B-N_u\right)\right]^2+A^2\cdot {N_u}^2\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)^2\ \ldots} + \left[{N_u}^2\cdot(A-C)\cdot(A+B)+A^3\cdot N_u-\left[A^2\cdot C\cdot(A+B)\right]\right]\right]^2}}$$

$$\mathrm{Den} := \frac{2\cdot A\cdot C\cdot(A+B)\cdot\left(A+B-N_u\right)}{\sqrt{\left[2\cdot A\cdot C\cdot(A+B)\cdot\left(A+B-N_u\right)\right]^2}} \qquad L := \frac{\mathrm{Num}}{\mathrm{Den}}$$

$\mathrm{Num} = 1$ $\mathrm{Den} = 1$ $L = 1$

$$L - \frac{\left[\sqrt{C^2\cdot(A+B)^2\cdot\left[A^2+N_u\cdot\left(2\cdot A+2\cdot B-N_u\right)\right]^2+A^2\cdot {N_u}^2\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)^2\ \ldots} + A^3\cdot N_u+{N_u}^2\cdot(A+B)\cdot(A-C)-A^2\cdot C\cdot(A+B)\right]\cdot\sqrt{A^2\cdot C^2\cdot(A+B)^2\cdot\left(A+B-N_u\right)^2}}{+\ 2\cdot A\cdot C\cdot N_u\cdot\left[N_u\cdot(A+B)+A^2\right]\cdot(A+B)\cdot\left(3\cdot A^2+4\cdot A\cdot B-2\cdot A\cdot N_u+2\cdot B^2-2\cdot B\cdot N_u+{N_u}^2\right)}}{A\cdot C\cdot\sqrt{\left[\sqrt{C^2\cdot(A+B)^2\cdot\left[A^2+N_u\cdot\left(2\cdot A+2\cdot B-N_u\right)\right]^2+A^2\cdot {N_u}^2\cdot\left(A^2+N_u\cdot A+B\cdot N_u\right)^2\ \ldots} + A^3\cdot N_u+{N_u}^2\cdot(A+B)\cdot(A-C)-A^2\cdot C\cdot(A+B)\right]^2}\cdot(A+B)\cdot\left(A+B-N_u\right)}}{+\ 2\cdot A\cdot C\cdot N_u\cdot\left[N_u\cdot(A+B)+A^2\right]\cdot(A+B)\cdot\left(3\cdot A^2+4\cdot A\cdot B-2\cdot A\cdot N_u+2\cdot B^2-2\cdot B\cdot N_u+{N_u}^2\right)}} = 0$$

4RST8B4R11



$N_1 = 1.10159$
$N_2 = 1.82802$
$N_3 = 0.78668$
$R = 1.36734$

Unit. $AB := 1$ **Given.** $N_1 := 1.10159$ $N_2 := 1.82802$ $N_3 := .78668$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u^2 \cdot (C - A) \cdot \left[A^2 + N_u \cdot (A + B)\right]}{A^2 \cdot C^2 \cdot (A + B - N_u)} = 1.367376$$

$$Num := \frac{N_u^2 \cdot (C - A) \cdot \left[A^2 + N_u \cdot (A + B)\right]}{\sqrt{\left[N_u^2 \cdot (C - A) \cdot \left[A^2 + N_u \cdot (A + B)\right]\right]^2}}$$

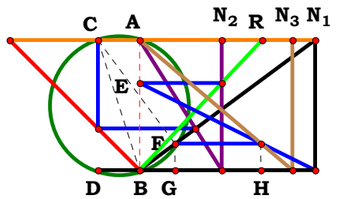
$$Den := \frac{A^2 \cdot C^2 \cdot (A + B - N_u)}{\sqrt{\left[A^2 \cdot C^2 \cdot (A + B - N_u)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \left[N_u \cdot (A + B) + A^2\right] \cdot (C - A) \cdot \sqrt{A^4 \cdot C^4 \cdot (A + B - N_u)^2}}{A^2 \cdot C^2 \cdot (A + B - N_u) \cdot \sqrt{N_u^4 \cdot \left[N_u \cdot (A + B) + A^2\right]^2 \cdot (C - A)^2}} = 0$$

4RST8B4R12



$N_1 = 1.34373$
$N_2 = 0.62698$
$N_3 = 1.17412$
$R = 0.93569$

Unit. $AB := 1$ Given. $N_1 := 1.34373$ $N_2 := .62698$ $N_3 := 1.17412$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left[{N_u}^2 \cdot (C - A) \cdot (A + B) - A^3 \cdot N_u + A^2 \cdot C \cdot (A + B) \right]}{A^2 \cdot B \cdot C \cdot \left(A + B - N_u \right)} = 0.935678$$

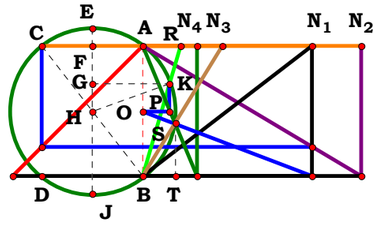
$$Num := \frac{N_u \cdot \left[{N_u}^2 \cdot (C - A) \cdot (A + B) - A^3 \cdot N_u + A^2 \cdot C \cdot (A + B) \right]}{\sqrt{\left[N_u \cdot \left[{N_u}^2 \cdot (C - A) \cdot (A + B) - A^3 \cdot N_u + A^2 \cdot C \cdot (A + B) \right] \right]^2}}$$

$$Den := \frac{A^2 \cdot B \cdot C \cdot \left(A + B - N_u \right)}{\sqrt{\left[A^2 \cdot B \cdot C \cdot \left(A + B - N_u \right) \right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[{N_u}^2 \cdot (C - A) \cdot (A + B) - A^3 \cdot N_u + A^2 \cdot C \cdot (A + B) \right] \cdot \sqrt{A^4 \cdot B^2 \cdot C^2 \cdot \left(A + B - N_u \right)^2}}{A^2 \cdot B \cdot C \cdot \sqrt{{N_u}^2 \cdot \left[{N_u}^2 \cdot (C - A) \cdot (A + B) - A^3 \cdot N_u + A^2 \cdot C \cdot (A + B) \right]^2} \cdot \left(A + B - N_u \right)} = 0$$

4RST8B5R0



$N_1 = 1.29530$
$N_2 = 1.67305$
$N_3 = 0.61234$
$N_4 = 0.41626$
$R = 0.29129$

Unit. $AB := 1$ **Given.** $N_1 := 1.2953$ $N_2 := 1.67305$ $N_3 := .61234$ $N_4 := .41626$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(A-D)\cdot\sqrt{A\cdot B}}{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot D^2\cdot(C-A+D)^2-4\cdot A\cdot N_u{}^2\cdot(A-D)^2+4\cdot B\cdot D\cdot N_u\cdot(A-D)\cdot(C-A+D)\right]}} = 0.291293$$

$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(A-D)\cdot\sqrt{A\cdot B}}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^3\cdot(A-D)\cdot\sqrt{A\cdot B}\right]^2}}$$

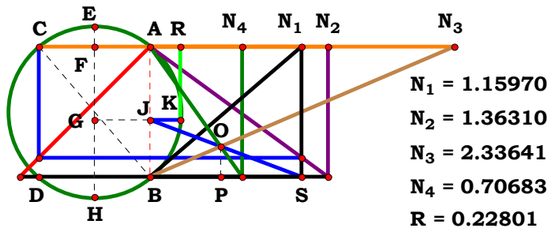
$$Den := \frac{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot D^2\cdot(C-A+D)^2-4\cdot A\cdot N_u{}^2\cdot(A-D)^2+4\cdot B\cdot D\cdot N_u\cdot(A-D)\cdot(C-A+D)\right]}}{\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot D^2\cdot(C-A+D)^2-4\cdot A\cdot N_u{}^2\cdot(A-D)^2+4\cdot B\cdot D\cdot N_u\cdot(A-D)\cdot(C-A+D)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u{}^{\frac{3}{2}}\cdot\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot D^2\cdot(C-A+D)^2-4\cdot A\cdot N_u{}^2\cdot(A-D)^2+4\cdot B\cdot D\cdot N_u\cdot(A-D)\cdot(C-A+D)\right]}\right]^2}\cdot\sqrt{A\cdot B}\cdot(A-D)}{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot D^2\cdot(C-A+D)^2-4\cdot A\cdot N_u{}^2\cdot(A-D)^2+4\cdot B\cdot D\cdot N_u\cdot(A-D)\cdot(C-A+D)\right]}\right]\cdot\sqrt{A\cdot B\cdot N_u{}^3\cdot(A-D)^2}} = 0$$

4RST8B5R1



Unit. $AB := 1$ Given. $N_1 := 1.15970$ $N_2 := 1.36310$ $N_3 := 2.33641$

$N_4 := .70683$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B\cdot(A-C-D)+\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot\left(2\cdot A^2+B^2\right)\cdot(A-D)}}{2\cdot A\cdot(C-A+D)} = 0.228007$$

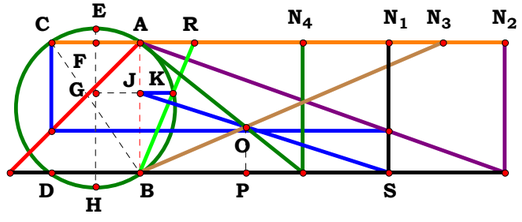
$$Num := \frac{B\cdot(A-C-D)+\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot\left(2\cdot A^2+B^2\right)\cdot(A-D)}}{\sqrt{\left[B\cdot(A-C-D)+\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot\left(2\cdot A^2+B^2\right)\cdot(A-D)}\right]^2}}$$

$$Den := \frac{2\cdot A\cdot(C-A+D)}{\sqrt{[2\cdot A\cdot(C-A+D)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot\left(2\cdot A^2+B^2\right)\cdot(A-D)}-B\cdot(C-A+D)\right]\cdot\sqrt{A^2\cdot(C-A+D)^2}}{A\cdot\sqrt{\left[\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot\left(2\cdot A^2+B^2\right)\cdot(A-D)}-B\cdot(C-A+D)\right]^2}\cdot(C-A+D)} = 0$$

4RST8B5R2



$N_1 = 1.90551$
$N_2 = 2.79660$
$N_3 = 2.32672$
$N_4 = 1.24924$
$R = 0.41761$

Unit. $AB := 1$ **Given.** $N_1 := 1.90551$ $N_2 := 2.79660$ $N_3 := 2.32672$

$N_4 := 1.24924$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{B\cdot(A-C-D)+\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot\left(2\cdot A^2+B^2\right)\cdot(A-D)}}{2\cdot A\cdot C}=0.417606$$

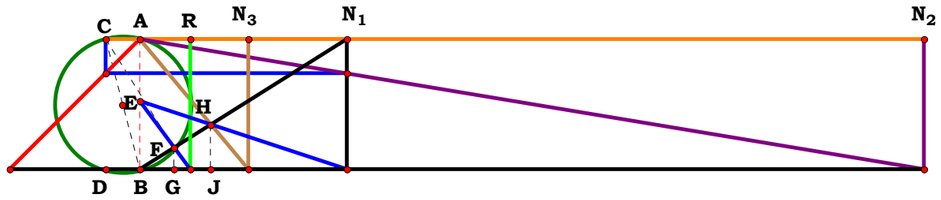
$$Num := \frac{B\cdot(A-C-D)+\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot\left(2\cdot A^2+B^2\right)\cdot(A-D)}}{\sqrt{\left[B\cdot(A-C-D)+\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot\left(2\cdot A^2+B^2\right)\cdot(A-D)}\right]^2}}$$

$$Den := \frac{2\cdot A\cdot C}{\sqrt{(2\cdot A\cdot C)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{A^2\cdot C^2}\cdot\left[\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot\left(2\cdot A^2+B^2\right)\cdot(A-D)}-B\cdot(C-A+D)\right]}{A\cdot C\cdot\sqrt{\left[\sqrt{B^2\cdot C^2+B^2\cdot(A-D)^2-2\cdot C\cdot\left(2\cdot A^2+B^2\right)\cdot(A-D)}-B\cdot(C-A+D)\right]^2}}=0$$

4RST8B5R4



$N_1 = 1.58588$
$N_2 = 6.01228$
$N_3 = 0.83511$
$R = 0.38271$

Unit. $AB := 1$ **Given.** $N_1 := 1.58588$ $N_2 := 6.01228$

$N_3 := .83511$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - B \cdot N_u\right)}{A^2 \cdot (A - C) + N_u \cdot \left(B \cdot C + A \cdot N_u\right)} = 0.382713$$

$$Num := \frac{N_u \cdot \left(A^2 - B \cdot N_u\right)}{\sqrt{\left[N_u \cdot \left(A^2 - B \cdot N_u\right)\right]^2}}$$

$$Den := \frac{A^2 \cdot (A - C) + N_u \cdot \left(B \cdot C + A \cdot N_u\right)}{\sqrt{\left[A^2 \cdot (A - C) + N_u \cdot \left(B \cdot C + A \cdot N_u\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[A^2 \cdot (A - C) + N_u \cdot \left(B \cdot C + A \cdot N_u\right)\right]^2} \cdot \left(A^2 - B \cdot N_u\right)}{\sqrt{{N_u}^2 \cdot \left(A^2 - B \cdot N_u\right)^2} \cdot \left[A^2 \cdot (A - C) + N_u \cdot \left(B \cdot C + A \cdot N_u\right)\right]} = 0$$

4RST8AB5R5

Unit.

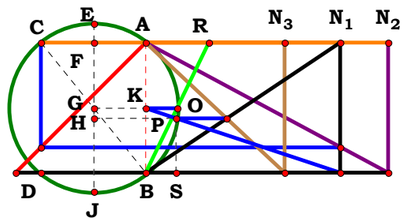
$AB := 1$

Given.

$N_1 := 1.48902$

$N_2 := 1.85708$

$N_3 := 1.06757$



$N_1 = 1.48902$

$N_2 = 1.85708$

$N_3 = 1.06757$

$R = 0.48409$

Descriptions.

$AC := \frac{N_1}{N_2}$ $\quad EJ := \sqrt{AB^2 + AC^2}$

$AF := \frac{AC}{2}$ $\quad EF := \frac{EJ - AB}{2}$

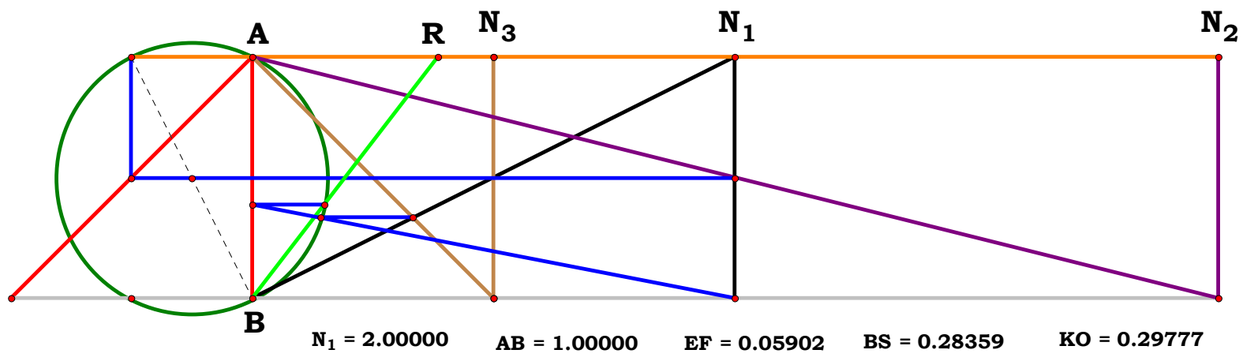
$PS := \frac{N_3}{N_1 + N_3}$ $\quad HJ := PS + EF$

$HP := \sqrt{HJ \cdot (EJ - HJ)}$ $\quad BS := HP - AF$

$BK := \frac{PS \cdot N_1}{N_1 - BS}$ $\quad GJ := BK + EF$

$GO := \sqrt{GJ \cdot (EJ - GJ)}$ $\quad KO := GO - AF$

$R := \frac{KO}{BK}$ $\quad R = 0.484091$



$N_1 = 2.00000$ $\quad AB = 1.00000$ $\quad EF = 0.05902$ $\quad BS = 0.28359$ $\quad KO = 0.29777$

$N_2 = 4.00000$ $\quad AC = 0.50000$ $\quad PS = 0.33333$ $\quad BK = 0.38841$ $\quad R\text{-}\frac{KO}{BK} = 0.00000$

$N_3 = 1.00000$ $\quad EJ = 1.11803$ $\quad HJ = 0.39235$ $\quad GJ = 0.44743$

$R = 0.76663$ $\quad AF = 0.25000$ $\quad HP = 0.53359$ $\quad GO = 0.54777$

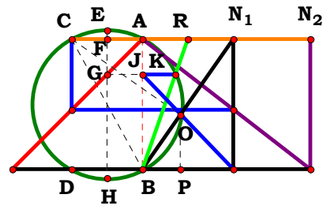
Definitions.

$A := \sqrt{AC^2 \cdot (N_1 + N_3)^2 + 4 \cdot N_1 \cdot N_3}$ $\quad B := \sqrt{(N_1 + N_3)^2}$ $\quad C := \sqrt{(N_1 + N_3)^2 \cdot [A - B \cdot (AC + 2 \cdot N_1)]^2}$

$D := \sqrt{AC^2 \cdot (N_1 + N_3)^2 \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)^2 - 8 \cdot B \cdot N_1 \cdot N_3 \cdot [(N_1 + N_3) \cdot (A - AC \cdot B) - 2 \cdot B \cdot N_1^2]}$

$R - \frac{(AC \cdot C - D) \cdot (N_1 + N_3) \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)}{4 \cdot B \cdot C \cdot N_1 \cdot N_3} = 0$

4RST8B5R6



$N_1 = 0.69478$

$N_2 = 1.28562$

$R = 0.34426$

Unit. $AB := 1$ Given. $N_1 := .69478$ $N_2 := 1.28562$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{\sqrt{4\cdot A^4\cdot N_u\cdot(3\cdot B+N_u)+B^2\cdot {N_u}^4-2\cdot {N_u}^3\cdot B\cdot(2\cdot A^2-B^2)-{N_u}^2\cdot B^2\cdot(8\cdot A^2-B^2)-4\cdot A^6}-B\cdot N_u\cdot(B+N_u)}{2\cdot A\cdot(A^2-B\cdot N_u)} = 0.34425$$

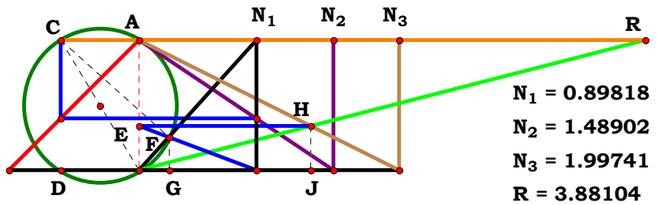
$$Num := \frac{\sqrt{4\cdot A^4\cdot N_u\cdot(3\cdot B+N_u)+B^2\cdot {N_u}^4-2\cdot {N_u}^3\cdot B\cdot(2\cdot A^2-B^2)-{N_u}^2\cdot B^2\cdot(8\cdot A^2-B^2)-4\cdot A^6}-B\cdot N_u\cdot(B+N_u)}{\sqrt{\left[\sqrt{4\cdot A^4\cdot N_u\cdot(3\cdot B+N_u)+B^2\cdot {N_u}^4-2\cdot {N_u}^3\cdot B\cdot(2\cdot A^2-B^2)-{N_u}^2\cdot B^2\cdot(8\cdot A^2-B^2)-4\cdot A^6}-B\cdot N_u\cdot(B+N_u)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot(A^2-B\cdot N_u)}{\sqrt{\left[2\cdot A\cdot(A^2-B\cdot N_u)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A^2\cdot(A^2-B\cdot N_u)^2}\cdot\left[\sqrt{B^2\cdot {N_u}^4-4\cdot A^6+2\cdot B\cdot {N_u}^3\cdot(B^2-2\cdot A^2)+4\cdot A^4\cdot N_u\cdot(3\cdot B+N_u)+B^2\cdot {N_u}^2\cdot(B^2-8\cdot A^2)}-B\cdot N_u\cdot(B+N_u)\right]}{A\cdot\sqrt{\left[\sqrt{B^2\cdot {N_u}^4-4\cdot A^6+2\cdot B\cdot {N_u}^3\cdot(B^2-2\cdot A^2)+4\cdot A^4\cdot N_u\cdot(3\cdot B+N_u)+B^2\cdot {N_u}^2\cdot(B^2-8\cdot A^2)}-B\cdot N_u\cdot(B+N_u)\right]^2}\cdot(A^2-B\cdot N_u)} = 0$$

4RST8B5R7



$N_1 = 0.89818$

$N_2 = 1.48902$

$N_3 = 1.99741$

$R = 3.88104$

Unit. $AB := 1$ **Given.** $N_1 := .89818$ $N_2 := 1.48902$ $N_3 := 1.99741$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u^3 - N_u \cdot \left(A^2 - 2 \cdot B \cdot N_u\right)}{A^2 \cdot C - B \cdot C \cdot N_u} = 3.880889$$

$$Num := \frac{N_u^3 - N_u \cdot \left(A^2 - 2 \cdot B \cdot N_u\right)}{\sqrt{\left[N_u^3 - N_u \cdot \left(A^2 - 2 \cdot B \cdot N_u\right)\right]^2}}$$

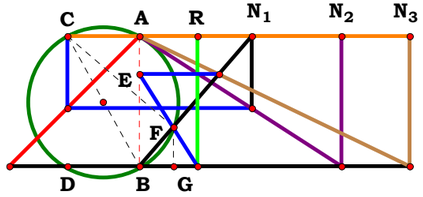
$$Den := \frac{A^2 \cdot C - B \cdot C \cdot N_u}{\sqrt{\left(A^2 \cdot C - B \cdot C \cdot N_u\right)^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{\left(A^2 \cdot C - B \cdot C \cdot N_u\right)^2} \cdot \left[N_u^3 - N_u \cdot \left(A^2 - 2 \cdot B \cdot N_u\right)\right]}{\sqrt{\left[N_u^3 - N_u \cdot \left(A^2 - 2 \cdot B \cdot N_u\right)\right]^2} \cdot \left(A^2 \cdot C - B \cdot C \cdot N_u\right)} = 0$$

4RST8B5R8



$N_1 = 0.85944$
$N_2 = 1.54713$
$N_3 = 2.07489$
$R = 0.44930$

Unit. $AB := 1$ **Given.** $N_1 := .85944$ $N_2 := 1.54713$ $N_3 := 2.07489$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - B \cdot N_u\right)}{A \cdot {N_u}^2 - C \cdot A^2 + B \cdot N_u \cdot (A + C)} = 0.4493$$

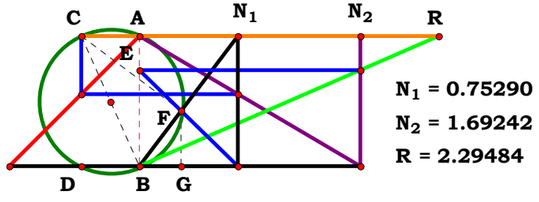
$$Num := \frac{N_u \cdot \left(A^2 - B \cdot N_u\right)}{\sqrt{\left[N_u \cdot \left(A^2 - B \cdot N_u\right)\right]^2}}$$

$$Den := \frac{A \cdot {N_u}^2 - C \cdot A^2 + B \cdot N_u \cdot (A + C)}{\sqrt{\left[A \cdot {N_u}^2 - C \cdot A^2 + B \cdot N_u \cdot (A + C)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[A \cdot {N_u}^2 - A^2 \cdot C + B \cdot N_u \cdot (A + C)\right]^2} \cdot \left(A^2 - B \cdot N_u\right)}{\sqrt{{N_u}^2 \cdot \left(A^2 - B \cdot N_u\right)^2} \cdot \left[A \cdot {N_u}^2 - A^2 \cdot C + B \cdot N_u \cdot (A + C)\right]} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := .75290$ $N_2 := 1.69242$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u^2 \cdot (B + N_u)}{B \cdot (A^2 - B \cdot N_u)} = 2.29486$$

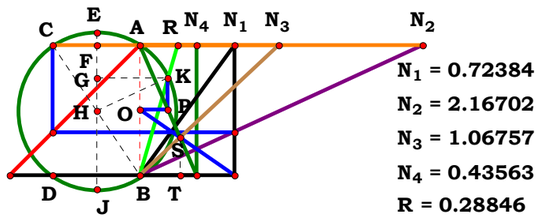
$$Num := \frac{N_u^2 \cdot (B + N_u)}{\sqrt{\left[N_u^2 \cdot (B + N_u)\right]^2}}$$

$$Den := \frac{B \cdot (A^2 - B \cdot N_u)}{\sqrt{\left[B \cdot (A^2 - B \cdot N_u)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \sqrt{B^2 \cdot (A^2 - B \cdot N_u)^2} \cdot (B + N_u)}{B \cdot \sqrt{N_u^4 \cdot (B + N_u)^2} \cdot (A^2 - B \cdot N_u)} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := .72384$ $N_2 := 2.16702$ $N_3 := 1.06757$ $N_4 := .43563$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(A-D)\cdot\sqrt{A\cdot B}}{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot D^2\cdot(C-A+D)^2-4\cdot A\cdot N_u^{\,2}\cdot(A-D)^2+4\cdot D\cdot N_u\cdot(A-B)\cdot(A-D)\cdot(C-A+D)\right]}} = 0.288461$$

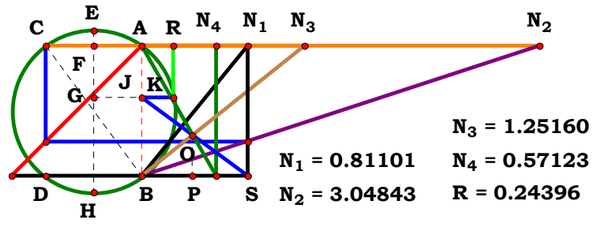
$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^3\cdot(A-D)\cdot\sqrt{A\cdot B}}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^3\cdot(A-D)\cdot\sqrt{A\cdot B}\right]^2}}$$

$$Den := \frac{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot D^2\cdot(C-A+D)^2-4\cdot A\cdot N_u^{\,2}\cdot(A-D)^2+4\cdot D\cdot N_u\cdot(A-B)\cdot(A-D)\cdot(C-A+D)\right]}}{\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot D^2\cdot(C-A+D)^2-4\cdot A\cdot N_u^{\,2}\cdot(A-D)^2+4\cdot D\cdot N_u\cdot(A-B)\cdot(A-D)\cdot(C-A+D)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = -1$ $Den = -1$ $L = 1$

$$L - \frac{N_u^{\frac{3}{2}}\cdot\sqrt{\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot D^2\cdot(C-A+D)^2-4\cdot A\cdot N_u^{\,2}\cdot(A-D)^2+4\cdot D\cdot N_u\cdot(A-B)\cdot(A-D)\cdot(C-A+D)\right]}+D\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot(C-A+D)\right]^2}\cdot\sqrt{A\cdot B}\cdot(A-D)}{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot D\cdot(A-C-D)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot D^2\cdot(C-A+D)^2-4\cdot A\cdot N_u^{\,2}\cdot(A-D)^2+4\cdot D\cdot N_u\cdot(A-B)\cdot(A-D)\cdot(C-A+D)\right]}\right]\cdot\sqrt{A\cdot B\cdot N_u^{\,3}\cdot(A-D)^2}} = 0$$



Unit. $AB := 1$ Given. $N_1 := .81101$ $N_2 := 3.04843$ $N_3 := 1.25160$

$N_4 := .57123$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

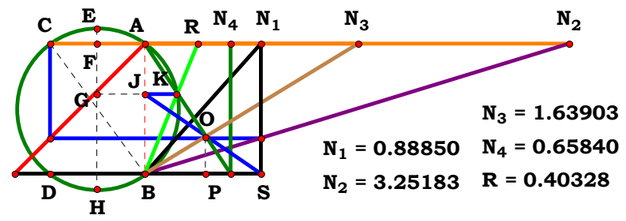
$$\frac{(A-C-D)\cdot(A-B)+\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}}{2\cdot A\cdot(C-A+D)} = 0.243965$$

$$Num := \frac{(A-C-D)\cdot(A-B)+\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}}{\sqrt{\left[(A-C-D)\cdot(A-B)+\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}\right]^2}}$$

$$Den := \frac{2\cdot A\cdot(C-A+D)}{\sqrt{[2\cdot A\cdot(C-A+D)]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{A^2\cdot(C-A+D)^2}\cdot\left[\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}-(A-B)\cdot(C-A+D)\right]}{A\cdot\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}-(A-B)\cdot(C-A+D)\right]^2}\cdot(C-A+D)} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := .88850$ $N_2 := 3.25183$ $N_3 := 1.63903$

$N_4 := .65840$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$ $D := \frac{N_u}{N_4}$

Descriptions.

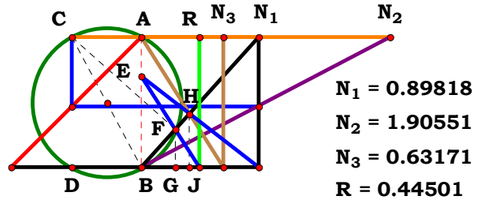
$$\frac{(A-C-D)\cdot(A-B)+\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}}{2\cdot A\cdot C}=0.403288$$

$$Num := \frac{(A-C-D)\cdot(A-B)+\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}}{\sqrt{\left[(A-C-D)\cdot(A-B)+\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}\right]^2}}$$

$$Den := \frac{2\cdot A\cdot C}{\sqrt{(2\cdot A\cdot C)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{A^2\cdot C^2}\cdot\left[\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}-(A-B)\cdot(C-A+D)\right]}{A\cdot C\cdot\sqrt{\left[\sqrt{C^2\cdot(A-B)^2+(A-B)^2\cdot(A-D)^2-2\cdot C\cdot(A-D)\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)}-(A-B)\cdot(C-A+D)\right]^2}}=0$$



Unit. $AB := 1$ **Given.** $N_1 := .89818$ $N_2 := 1.90551$ $N_3 := .63171$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left[A^2 - N_u \cdot (A - B)\right]}{A^3 - C \cdot A^2 + A \cdot N_u{}^2 + C \cdot N_u \cdot (A - B)} = 0.445008$$

$$Num := \frac{N_u \cdot \left[A^2 - N_u \cdot (A - B)\right]}{\sqrt{\left[N_u \cdot \left[A^2 - N_u \cdot (A - B)\right]\right]^2}}$$

$$Den := \frac{A^3 - C \cdot A^2 + A \cdot N_u{}^2 + C \cdot N_u \cdot (A - B)}{\sqrt{\left[A^3 - C \cdot A^2 + A \cdot N_u{}^2 + C \cdot N_u \cdot (A - B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[A^3 - A^2 \cdot C + A \cdot N_u{}^2 + C \cdot N_u \cdot (A - B)\right]^2} \cdot \left[A^2 - N_u \cdot (A - B)\right]}{\sqrt{N_u{}^2 \cdot \left[A^2 - N_u \cdot (A - B)\right]^2} \cdot \left[A^3 - A^2 \cdot C + A \cdot N_u{}^2 + C \cdot N_u \cdot (A - B)\right]} = 0$$

4RST8AB6R5

Unit.

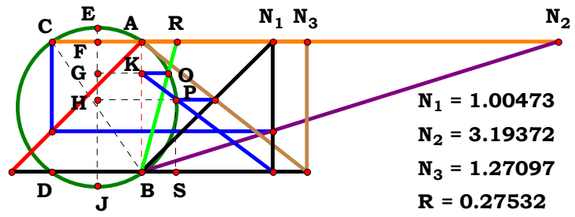
$AB := 1$

Given.

$N_1 := 1.00473$

$N_2 := 3.19372$

$N_3 := 1.27097$



$N_1 = 1.00473$

$N_2 = 3.19372$

$N_3 = 1.27097$

$R = 0.27532$

Descriptions.

$AC := \frac{N_2 - N_1}{N_2}$ $EJ := \sqrt{AB^2 + AC^2}$

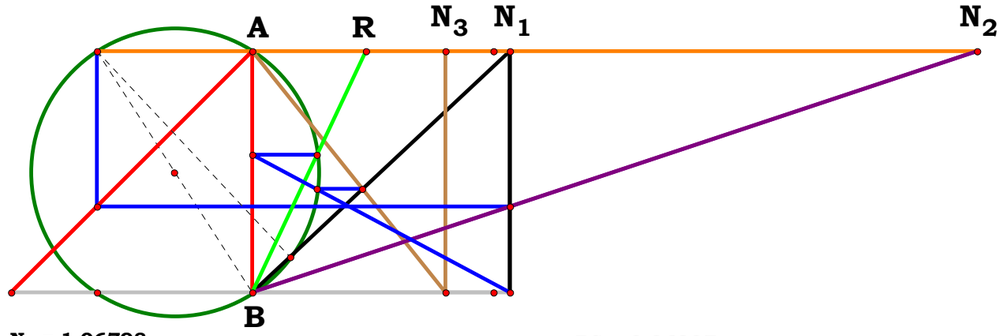
$AF := \frac{AC}{2}$ $EF := \frac{EJ - AB}{2}$

$PS := \frac{N_3}{N_1 + N_3}$ $HJ := PS + EF$

$HP := \sqrt{HJ \cdot (EJ - HJ)}$ $BS := HP - AF$

$BK := \frac{PS \cdot N_1}{N_1 - BS}$ $GJ := BK + EF$

$GO := \sqrt{GJ \cdot (EJ - GJ)}$ $KO := GO - AF$



$N_1 = 1.06798$ $AB = 1.00000$ $EF = 0.09472$ $BS = 0.26837$ $KO = 0.26834$

$N_2 = 3.00000$ $AC = 0.64401$ $PS = 0.42827$ $BK = 0.57201$ $R - \frac{KO}{BK} = 0.00000$

$N_3 = 0.80000$ $EJ = 1.18943$ $HJ = 0.52299$ $GJ = 0.66673$

$R = 0.46911$ $AF = 0.32200$ $HP = 0.59037$ $GO = 0.59034$

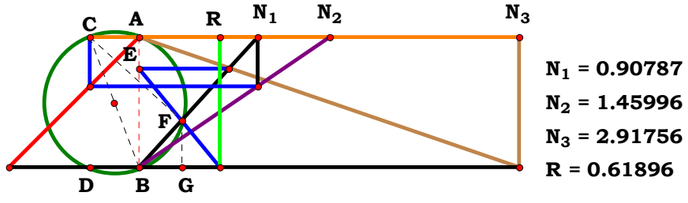
$R := \frac{KO}{BK}$ $R = 0.275323$

Definitions.

$A := \sqrt{AC^2 \cdot (N_1 + N_3)^2 + 4 \cdot N_1 \cdot N_3}$ $B := \sqrt{(N_1 + N_3)^2}$ $C := \sqrt{(N_1 + N_3)^2 \cdot [A - B \cdot (AC + 2 \cdot N_1)]^2}$

$D := \sqrt{AC^2 \cdot (N_1 + N_3)^2 \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)^2 - 8 \cdot B \cdot N_1 \cdot N_3 \cdot [(N_1 + N_3) \cdot (A - AC \cdot B) - 2 \cdot B \cdot N_1^2]}$

$R - \frac{(AC \cdot C - D) \cdot (N_1 + N_3) \cdot (A - AC \cdot B - 2 \cdot B \cdot N_1)}{4 \cdot B \cdot C \cdot N_1 \cdot N_3} = 0$



Unit. $AB := 1$ Given. $N_1 := .90787$ $N_2 := 1.45996$ $N_3 := 2.91756$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left(A^2 - N_u \cdot A + B \cdot N_u\right)}{A \cdot \left(N_u{}^2 - A \cdot C\right) + N_u \cdot (A + C) \cdot (A - B)} = 0.618963$$

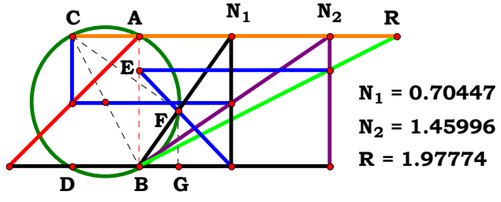
$$Num := \frac{N_u \cdot \left(A^2 - N_u \cdot A + B \cdot N_u\right)}{\sqrt{\left[N_u \cdot \left(A^2 - N_u \cdot A + B \cdot N_u\right)\right]^2}}$$

$$Den := \frac{A \cdot \left(N_u{}^2 - A \cdot C\right) + N_u \cdot (A + C) \cdot (A - B)}{\sqrt{\left[A \cdot \left(N_u{}^2 - A \cdot C\right) + N_u \cdot (A + C) \cdot (A - B)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \sqrt{\left[A \cdot \left(N_u{}^2 - A \cdot C\right) + N_u \cdot (A + C) \cdot (A - B)\right]^2} \cdot \left(A^2 - N_u \cdot A + B \cdot N_u\right)}{\sqrt{N_u{}^2 \cdot \left(A^2 - N_u \cdot A + B \cdot N_u\right)^2} \cdot \left[A \cdot \left(N_u{}^2 - A \cdot C\right) + N_u \cdot (A + C) \cdot (A - B)\right]} = 0$$



Unit. $AB := 1$ Given. $N_1 := .70447$ $N_2 := 1.45996$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$

Descriptions.

$$\frac{N_u^2 \cdot (A - B + N_u)}{B \cdot (A^2 - N_u \cdot A + B \cdot N_u)} = 1.97774$$

$$Num := \frac{N_u^2 \cdot (A - B + N_u)}{\sqrt{\left[N_u^2 \cdot (A - B + N_u)\right]^2}}$$

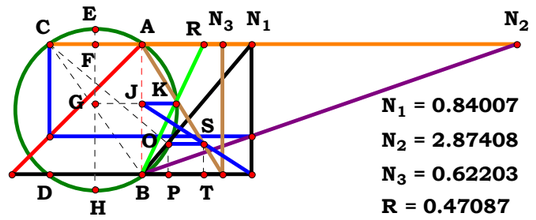
$$Den := \frac{B \cdot (A^2 - N_u \cdot A + B \cdot N_u)}{\sqrt{\left[B \cdot (A^2 - N_u \cdot A + B \cdot N_u)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \sqrt{B^2 \cdot (A^2 - N_u \cdot A + B \cdot N_u)^2} \cdot (A - B + N_u)}{B \cdot \sqrt{N_u^4 \cdot (A - B + N_u)^2} \cdot (A^2 - N_u \cdot A + B \cdot N_u)} = 0$$

4RST8AB6R10



Unit. $AB := 1$ **Given.** $N_1 := .84007$ $N_2 := 2.87408$ $N_3 := .62203$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{(A-B)\cdot\left[N_u^{\,2}\cdot(A-C)+N_u\cdot A\cdot(A-B)-A^2\cdot C\right]+\sqrt{\begin{matrix}C^2\cdot\left[A^2\cdot\left(A-B+2\cdot N_u\right)-N_u^{\,2}\cdot(A-B)\right]^2+A^2\cdot N_u^{\,2}\cdot(A-B)^2\cdot\left(A-B+N_u\right)^2\ \ldots\\ +\ -2\cdot C\cdot A\cdot N_u\cdot\left(A-B+N_u\right)\cdot\left[N_u^{\,2}\cdot(A-B)^2-2\cdot N_u\cdot A^2\cdot(A-B)+A^2\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)\right]\end{matrix}}}{2\cdot A\cdot C\cdot\left(A^2-N_u\cdot A+B\cdot N_u\right)}=0.470865$$

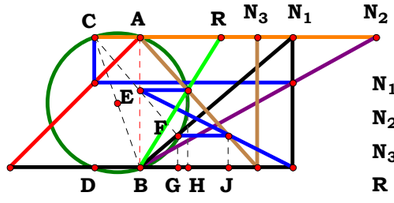
$$\mathrm{Num}:=\frac{(A-B)\cdot\left[N_u^{\,2}\cdot(A-C)+N_u\cdot A\cdot(A-B)-A^2\cdot C\right]+\sqrt{\begin{matrix}C^2\cdot\left[A^2\cdot\left(A-B+2\cdot N_u\right)-N_u^{\,2}\cdot(A-B)\right]^2+A^2\cdot N_u^{\,2}\cdot(A-B)^2\cdot\left(A-B+N_u\right)^2\ \ldots\\ +\ -2\cdot C\cdot A\cdot N_u\cdot\left(A-B+N_u\right)\cdot\left[N_u^{\,2}\cdot(A-B)^2-2\cdot N_u\cdot A^2\cdot(A-B)+A^2\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)\right]\end{matrix}}}{\sqrt{\left[(A-B)\cdot\left[N_u^{\,2}\cdot(A-C)+N_u\cdot A\cdot(A-B)-A^2\cdot C\right]+\sqrt{\begin{matrix}C^2\cdot\left[A^2\cdot\left(A-B+2\cdot N_u\right)-N_u^{\,2}\cdot(A-B)\right]^2+A^2\cdot N_u^{\,2}\cdot(A-B)^2\cdot\left(A-B+N_u\right)^2\ \ldots\\ +\ -2\cdot C\cdot A\cdot N_u\cdot\left(A-B+N_u\right)\cdot\left[N_u^{\,2}\cdot(A-B)^2-2\cdot N_u\cdot A^2\cdot(A-B)+A^2\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)\right]\end{matrix}}\right]^2}}$$

$$\mathrm{Den}:=\frac{2\cdot A\cdot C\cdot\left(A^2-N_u\cdot A+B\cdot N_u\right)}{\sqrt{\left[2\cdot A\cdot C\cdot\left(A^2-N_u\cdot A+B\cdot N_u\right)\right]^2}}\qquad L:=\frac{\mathrm{Num}}{\mathrm{Den}}$$

$\mathrm{Num}=1$ $\mathrm{Den}=1$ $L=1$

$$L-\frac{\left[\sqrt{\begin{matrix}C^2\cdot\left[N_u^{\,2}\cdot(A-B)-A^2\cdot\left(A-B+2\cdot N_u\right)\right]^2+A^2\cdot N_u^{\,2}\cdot(A-B)^2\cdot\left(A-B+N_u\right)^2\ \ldots\\ +\ -2\cdot A\cdot C\cdot N_u\cdot\left(A-B+N_u\right)\cdot\left[N_u^{\,2}\cdot(A-B)^2+A^2\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)-2\cdot A^2\cdot N_u\cdot(A-B)\right]\end{matrix}}+(A-B)\cdot\left[N_u^{\,2}\cdot(A-C)-A^2\cdot C+A\cdot N_u\cdot(A-B)\right]\right]\cdot\sqrt{A^2\cdot C^2\cdot\left(A^2-N_u\cdot A+B\cdot N_u\right)^2}}{A\cdot C\cdot\sqrt{\left[\sqrt{\begin{matrix}C^2\cdot\left[N_u^{\,2}\cdot(A-B)-A^2\cdot\left(A-B+2\cdot N_u\right)\right]^2+A^2\cdot N_u^{\,2}\cdot(A-B)^2\cdot\left(A-B+N_u\right)^2\ \ldots\\ +\ -2\cdot A\cdot C\cdot N_u\cdot\left(A-B+N_u\right)\cdot\left[N_u^{\,2}\cdot(A-B)^2+A^2\cdot\left(3\cdot A^2-2\cdot A\cdot B+B^2\right)-2\cdot A^2\cdot N_u\cdot(A-B)\right]\end{matrix}}+(A-B)\cdot\left[N_u^{\,2}\cdot(A-C)-A^2\cdot C+A\cdot N_u\cdot(A-B)\right]\right]^2\cdot\left(A^2-N_u\cdot A+B\cdot N_u\right)}}=0$$

4RST8B6R11



$N_1 = 1.16939$
$N_2 = 1.80865$
$N_3 = 0.90291$
$R = 0.62452$

Unit. $AB := 1$ **Given.** $N_1 := 1.16939$ $N_2 := 1.80865$ $N_3 := .90291$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u^2 \cdot (A - C) \cdot (B - A - N_u)}{C^2 \cdot \left[A^2 - N_u \cdot (A - B)\right]} = 0.624537$$

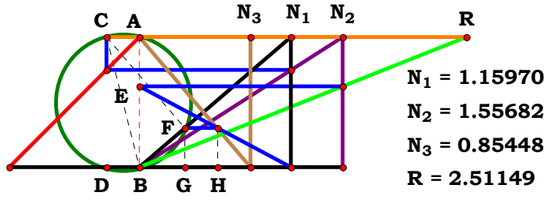
$$Num := \frac{N_u^2 \cdot (A - C) \cdot (B - A - N_u)}{\sqrt{\left[N_u^2 \cdot (A - C) \cdot (B - A - N_u)\right]^2}}$$

$$Den := \frac{C^2 \cdot \left[A^2 - N_u \cdot (A - B)\right]}{\sqrt{\left[C^2 \cdot \left[A^2 - N_u \cdot (A - B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^2 \cdot \sqrt{C^4 \cdot \left[A^2 - N_u \cdot (A - B)\right]^2} \cdot (A - C) \cdot (B - A - N_u)}{C^2 \cdot \left[A^2 - N_u \cdot (A - B)\right] \cdot \sqrt{N_u^4 \cdot (A - C)^2 \cdot (B - A - N_u)^2}} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 1.15970$ $N_2 := 1.55682$ $N_3 := .85448$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C \cdot N_u \cdot \left(A^2 + N_u{}^2\right) - A \cdot N_u{}^2 \cdot \left(A - B + N_u\right)}{B \cdot C \cdot \left[A^2 - N_u \cdot (A - B)\right]} = 2.511501$$

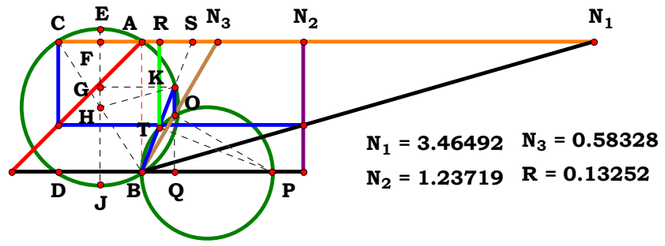
$$Num := \frac{C \cdot N_u \cdot \left(A^2 + N_u{}^2\right) - A \cdot N_u{}^2 \cdot \left(A - B + N_u\right)}{\sqrt{\left[C \cdot N_u \cdot \left(A^2 + N_u{}^2\right) - A \cdot N_u{}^2 \cdot \left(A - B + N_u\right)\right]^2}}$$

$$Den := \frac{B \cdot C \cdot \left[A^2 - N_u \cdot (A - B)\right]}{\sqrt{\left[B \cdot C \cdot \left[A^2 - N_u \cdot (A - B)\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[C \cdot N_u \cdot \left(A^2 + N_u{}^2\right) - A \cdot N_u{}^2 \cdot \left(A - B + N_u\right)\right] \cdot \sqrt{B^2 \cdot C^2 \cdot \left[A^2 - N_u \cdot (A - B)\right]^2}}{B \cdot C \cdot \sqrt{\left[C \cdot N_u \cdot \left(A^2 + N_u{}^2\right) - A \cdot N_u{}^2 \cdot \left(A - B + N_u\right)\right]^2} \cdot \left[A^2 - N_u \cdot (A - B)\right]} = 0$$

4RST10AB1R0



Unit. $AB := 1$ Given. $N_1 := 3.46492$ $N_2 := 1.23719$ $N_3 := .58328$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2\cdot B\cdot\left(\sqrt{N_u}\right)^9\cdot\sqrt{A\cdot B}}{\left(C^2+N_u{}^2\right)\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2+2\cdot A\cdot N_u{}^2-B\cdot N_u{}^2\right)+\sqrt{A}\cdot B\cdot\sqrt{N_u{}^5\cdot(4\cdot A-7\cdot B)+B\cdot C^4\cdot N_u-2\cdot C^2\cdot N_u{}^3\cdot(B-2\cdot A)}\right]}=0.132516$$

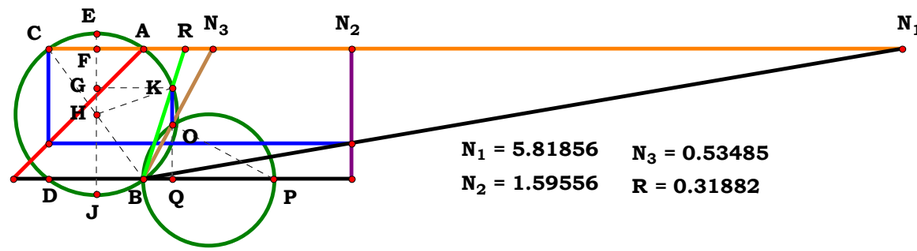
$$Num := \frac{2\cdot B\cdot\left(\sqrt{N_u}\right)^9\cdot\sqrt{A\cdot B}}{\sqrt{\left[2\cdot B\cdot\left(\sqrt{N_u}\right)^9\cdot\sqrt{A\cdot B}\right]^2}}$$

$$Den := \frac{\left(C^2+N_u{}^2\right)\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2+2\cdot A\cdot N_u{}^2-B\cdot N_u{}^2\right)+\sqrt{A}\cdot B\cdot\sqrt{N_u{}^5\cdot(4\cdot A-7\cdot B)+B\cdot C^4\cdot N_u-2\cdot C^2\cdot N_u{}^3\cdot(B-2\cdot A)}\right]}{\sqrt{\left[\left(C^2+N_u{}^2\right)\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2+2\cdot A\cdot N_u{}^2-B\cdot N_u{}^2\right)+\sqrt{A}\cdot B\cdot\sqrt{N_u{}^5\cdot(4\cdot A-7\cdot B)+B\cdot C^4\cdot N_u-2\cdot C^2\cdot N_u{}^3\cdot(B-2\cdot A)}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{B\cdot N_u{}^{\frac{9}{2}}\cdot\sqrt{\left(C^2+N_u{}^2\right)^2\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2+2\cdot A\cdot N_u{}^2-B\cdot N_u{}^2\right)+\sqrt{A}\cdot B\cdot\sqrt{N_u{}^5\cdot(4\cdot A-7\cdot B)+B\cdot C^4\cdot N_u-2\cdot C^2\cdot N_u{}^3\cdot(B-2\cdot A)}\right]^2}\cdot\sqrt{A\cdot B}}{\left(C^2+N_u{}^2\right)\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2+2\cdot A\cdot N_u{}^2-B\cdot N_u{}^2\right)+\sqrt{A}\cdot B\cdot\sqrt{N_u{}^5\cdot(4\cdot A-7\cdot B)+B\cdot C^4\cdot N_u-2\cdot C^2\cdot N_u{}^3\cdot(B-2\cdot A)}\right]\cdot\sqrt{A\cdot B^3\cdot N_u{}^9}}=0$$



Unit. $AB := 1$ Given. $N_1 := 5.81856$ $N_2 := 1.59556$ $N_3 := .53485$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}}{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)+\sqrt{A}\cdot\sqrt{{N_u}^5\cdot(4\cdot A-7\cdot B)+B\cdot C^4\cdot N_u-2\cdot C^2\cdot {N_u}^3\cdot(B-2\cdot A)}}=0.318811$$

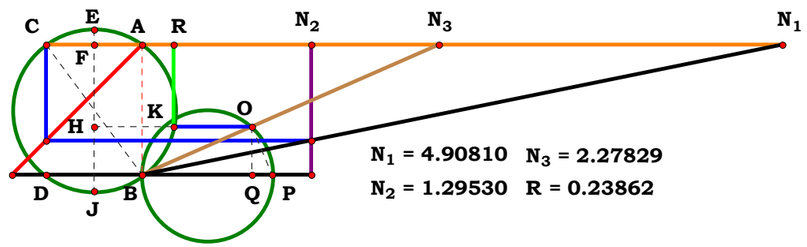
$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}\right]^2}}$$

$$Den := \frac{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)+\sqrt{A}\cdot\sqrt{{N_u}^5\cdot(4\cdot A-7\cdot B)+B\cdot C^4\cdot N_u-2\cdot C^2\cdot {N_u}^3\cdot(B-2\cdot A)}}{\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)+\sqrt{A}\cdot\sqrt{{N_u}^5\cdot(4\cdot A-7\cdot B)+B\cdot C^4\cdot N_u-2\cdot C^2\cdot {N_u}^3\cdot(B-2\cdot A)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{{N_u}^{\frac{5}{2}}\cdot\sqrt{\left[\sqrt{A}\cdot\sqrt{{N_u}^5\cdot(4\cdot A-7\cdot B)+B\cdot C^4\cdot N_u-2\cdot C^2\cdot {N_u}^3\cdot(B-2\cdot A)}+\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(C^2+{N_u}^2\right)\right]^2}\cdot\sqrt{A\cdot B}}{\left[\sqrt{A}\cdot\sqrt{{N_u}^5\cdot(4\cdot A-7\cdot B)+B\cdot C^4\cdot N_u-2\cdot C^2\cdot {N_u}^3\cdot(B-2\cdot A)}+\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(C^2+{N_u}^2\right)\right]\cdot\sqrt{A\cdot B\cdot {N_u}^5}}=0$$



Unit. $AB := 1$ **Given.** $N_1 := 4.90810$ $N_2 := 1.29530$ $N_3 := 2.27829$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{B^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)+A\cdot\left(C^2+N_u{}^2\right)^2\cdot(A-2\cdot B)}+\left(C^2+N_u{}^2\right)\cdot(A-B)}{2\cdot B\cdot\left(C^2+N_u{}^2\right)} = 0.238618$$

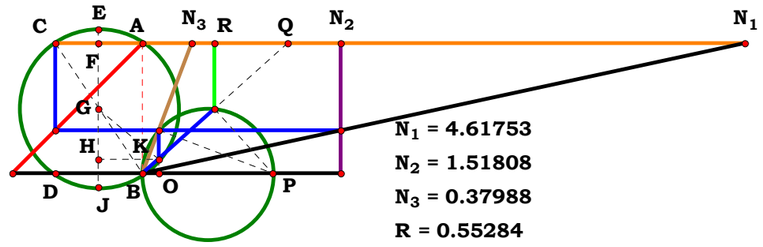
$$Num := \frac{\sqrt{B^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)+A\cdot\left(C^2+N_u{}^2\right)^2\cdot(A-2\cdot B)}+\left(C^2+N_u{}^2\right)\cdot(A-B)}{\sqrt{\left[\sqrt{B^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)+A\cdot\left(C^2+N_u{}^2\right)^2\cdot(A-2\cdot B)}+\left(C^2+N_u{}^2\right)\cdot(A-B)\right]^2}}$$

$$Den := \frac{2\cdot B\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[2\cdot B\cdot\left(C^2+N_u{}^2\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{B^2\cdot\left(C^2+N_u{}^2\right)^2}\cdot\left[\left(C^2+N_u{}^2\right)\cdot(A-B)+\sqrt{B^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)+A\cdot\left(C^2+N_u{}^2\right)^2\cdot(A-2\cdot B)}\right]}{B\cdot\left(C^2+N_u{}^2\right)\cdot\sqrt{\left[\left(C^2+N_u{}^2\right)\cdot(A-B)+\sqrt{B^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)+A\cdot\left(C^2+N_u{}^2\right)^2\cdot(A-2\cdot B)}\right]^2}} = 0$$

4RST10AB1R3



Unit. $AB := 1$ **Given.** $N_1 := 4.61753$ $N_2 := 1.51808$ $N_3 := .37988$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{B}\right)^2\cdot {N_u}^4}{\left(C^2+{N_u}^2\right)\cdot\left[B\cdot C^2-\sqrt{B}\cdot\sqrt{{N_u}^4\cdot(4\cdot A-7\cdot B)+B\cdot C^4-2\cdot C^2\cdot {N_u}^2\cdot(B-2\cdot A)}+{N_u}^2\cdot(2\cdot A-B)\right]} = 0.552845$$

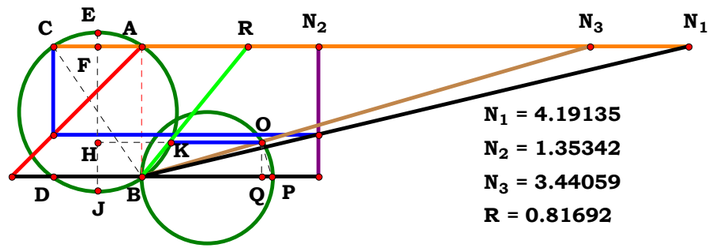
$$Num := \frac{2\cdot\left(\sqrt{B}\right)^2\cdot {N_u}^4}{\sqrt{\left[2\cdot\left(\sqrt{B}\right)^2\cdot {N_u}^4\right]^2}}$$

$$Den := \frac{\left(C^2+{N_u}^2\right)\cdot\left[B\cdot C^2-\sqrt{B}\cdot\sqrt{{N_u}^4\cdot(4\cdot A-7\cdot B)+B\cdot C^4-2\cdot C^2\cdot {N_u}^2\cdot(B-2\cdot A)}+{N_u}^2\cdot(2\cdot A-B)\right]}{\sqrt{\left[\left(C^2+{N_u}^2\right)\cdot\left[B\cdot C^2-\sqrt{B}\cdot\sqrt{{N_u}^4\cdot(4\cdot A-7\cdot B)+B\cdot C^4-2\cdot C^2\cdot {N_u}^2\cdot(B-2\cdot A)}+{N_u}^2\cdot(2\cdot A-B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{B\cdot {N_u}^4\cdot\sqrt{\left(C^2+{N_u}^2\right)^2\cdot\left[B\cdot C^2-\sqrt{B}\cdot\sqrt{{N_u}^4\cdot(4\cdot A-7\cdot B)+B\cdot C^4-2\cdot C^2\cdot {N_u}^2\cdot(B-2\cdot A)}+{N_u}^2\cdot(2\cdot A-B)\right]^2}}{\sqrt{B^2\cdot {N_u}^8}\cdot\left(C^2+{N_u}^2\right)\cdot\left[B\cdot C^2-\sqrt{B}\cdot\sqrt{{N_u}^4\cdot(4\cdot A-7\cdot B)+B\cdot C^4-2\cdot C^2\cdot {N_u}^2\cdot(B-2\cdot A)}+{N_u}^2\cdot(2\cdot A-B)\right]} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 4.19135$ $N_2 := 1.35342$ $N_3 := 3.44059$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{B^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)+A\cdot\left(C^2+N_u{}^2\right)^2\cdot(A-2\cdot B)}+\left(C^2+N_u{}^2\right)\cdot(A-B)}{2\cdot N_u\cdot B\cdot C}=0.816925$$

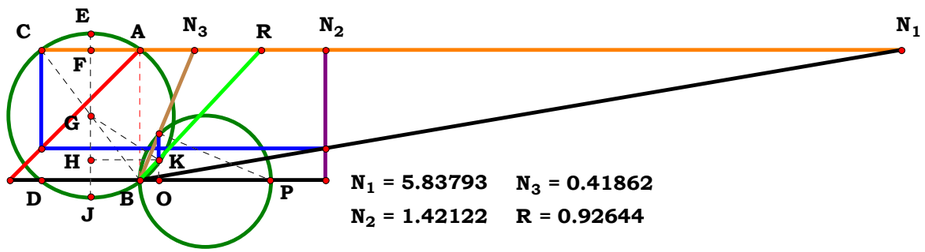
$$\text{Num} := \frac{\sqrt{B^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)+A\cdot\left(C^2+N_u{}^2\right)^2\cdot(A-2\cdot B)}+\left(C^2+N_u{}^2\right)\cdot(A-B)}{\sqrt{\left[\sqrt{B^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)+A\cdot\left(C^2+N_u{}^2\right)^2\cdot(A-2\cdot B)}+\left(C^2+N_u{}^2\right)\cdot(A-B)\right]^2}}$$

$$\text{Den} := \frac{2\cdot N_u\cdot B\cdot C}{\sqrt{\left(2\cdot N_u\cdot B\cdot C\right)^2}} \qquad L := \frac{\text{Num}}{\text{Den}}$$

$\text{Num} = 1$ $\text{Den} = 1$ $L = 1$

$$L-\frac{\left[\left(C^2+N_u{}^2\right)\cdot(A-B)+\sqrt{B^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)+A\cdot\left(C^2+N_u{}^2\right)^2\cdot(A-2\cdot B)}\right]\cdot\sqrt{B^2\cdot C^2\cdot N_u{}^2}}{B\cdot C\cdot N_u\cdot\sqrt{\left[\left(C^2+N_u{}^2\right)\cdot(A-B)+\sqrt{B^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)+A\cdot\left(C^2+N_u{}^2\right)^2\cdot(A-2\cdot B)}\right]^2}}=0$$

4RST10AB1R5



Unit. $AB := 1$ Given. $N_1 := 5.8379$ $N_2 := 1.42122$ $N_3 := .41862$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}}{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{A}\cdot\sqrt{N_u\cdot\left[{N_u}^4\cdot(4\cdot A-7\cdot B)+B\cdot C^4-2\cdot C^2\cdot{N_u}^2\cdot(B-2\cdot A)\right]}}=0.926446$$

$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}\right]^2}}$$

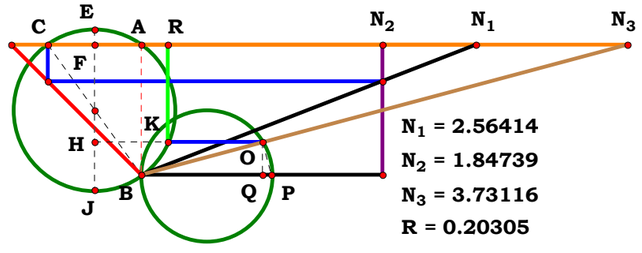
$$Den := \frac{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{A}\cdot\sqrt{N_u\cdot\left[{N_u}^4\cdot(4\cdot A-7\cdot B)+B\cdot C^4-2\cdot C^2\cdot{N_u}^2\cdot(B-2\cdot A)\right]}}{\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{A}\cdot\sqrt{N_u\cdot\left[{N_u}^4\cdot(4\cdot A-7\cdot B)+B\cdot C^4-2\cdot C^2\cdot{N_u}^2\cdot(B-2\cdot A)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{{N_u}^{\frac{5}{2}}\cdot\sqrt{A\cdot B}\cdot\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{A}\cdot\sqrt{N_u\cdot\left[{N_u}^4\cdot(4\cdot A-7\cdot B)+B\cdot C^4-2\cdot C^2\cdot{N_u}^2\cdot(B-2\cdot A)\right]}\right]^2}}{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{A}\cdot\sqrt{N_u\cdot\left[{N_u}^4\cdot(4\cdot A-7\cdot B)+B\cdot C^4-2\cdot C^2\cdot{N_u}^2\cdot(B-2\cdot A)\right]}\right]\cdot\sqrt{A\cdot B\cdot{N_u}^5}}=0$$

4RST10AB2R2



Unit. $AB := 1$ **Given.** $N_1 := 2.56414$ $N_2 := 1.84739$ $N_3 := 3.73116$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot B^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)}-A\cdot\left(C^2+N_u{}^2\right)}{2\cdot B\cdot\left(C^2+N_u{}^2\right)} = 0.203054$$

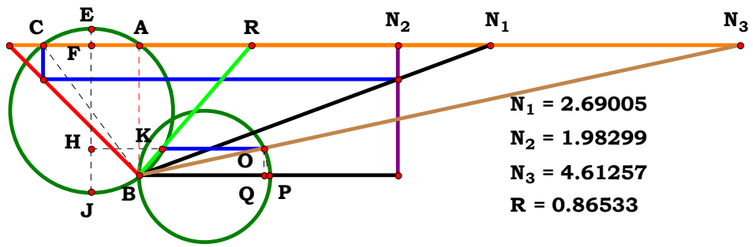
$$Num := \frac{\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot B^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)}-A\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot B^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)}-A\cdot\left(C^2+N_u{}^2\right)\right]^2}}$$

$$Den := \frac{2\cdot B\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[2\cdot B\cdot\left(C^2+N_u{}^2\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{B^2\cdot\left(C^2+N_u{}^2\right)^2}\cdot\left[\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot B^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)}-A\cdot\left(C^2+N_u{}^2\right)\right]}{B\cdot\left(C^2+N_u{}^2\right)\cdot\sqrt{\left[\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot B^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)}-A\cdot\left(C^2+N_u{}^2\right)\right]^2}} = 0$$

4RST10AB2R4



Unit. $AB := 1$ **Given.** $N_1 := 2.69005$ $N_2 := 1.98299$ $N_3 := 4.61257$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot B^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)}-A\cdot\left(C^2+N_u{}^2\right)}{2\cdot N_u\cdot B\cdot C}=0.865329$$

$$Num := \frac{\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot B^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)}-A\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot B^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)}-A\cdot\left(C^2+N_u{}^2\right)\right]^2}}$$

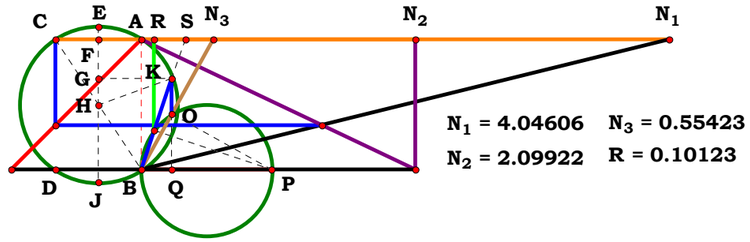
$$Den := \frac{2\cdot N_u\cdot B\cdot C}{\sqrt{\left(2\cdot N_u\cdot B\cdot C\right)^2}} \qquad L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L-\frac{\left[\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot B^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)}-A\cdot\left(C^2+N_u{}^2\right)\right]\cdot\sqrt{B^2\cdot C^2\cdot N_u{}^2}}{B\cdot C\cdot N_u\cdot\sqrt{\left[\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot B^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)}-A\cdot\left(C^2+N_u{}^2\right)\right]^2}}=0$$

4RST10AB3R0

Descriptions.



Unit. $AB := 1$ **Given.** $N_1 := 4.04606$ $N_2 := 2.09922$ $N_3 := .55423$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

$$\frac{2 \cdot N_u^{5} \cdot \left(\sqrt{A \cdot B}\right)^2 \cdot (A+B)}{\left(C^2 + N_u^{2}\right) \cdot \left[A \cdot B \cdot N_u \cdot \left[C^2 \cdot (A+B) + N_u^{2} \cdot (A-B)\right] + A \cdot B \cdot \sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{2} \cdot (A-B)\right]} \cdot \sqrt{N_u \cdot (A+B)}\right]} = 0.101239$$

$$\text{Num} := \frac{2 \cdot N_u^{5} \cdot \left(\sqrt{A \cdot B}\right)^2 \cdot (A+B)}{\sqrt{\left[2 \cdot N_u^{5} \cdot \left(\sqrt{A \cdot B}\right)^2 \cdot (A+B)\right]^2}}$$

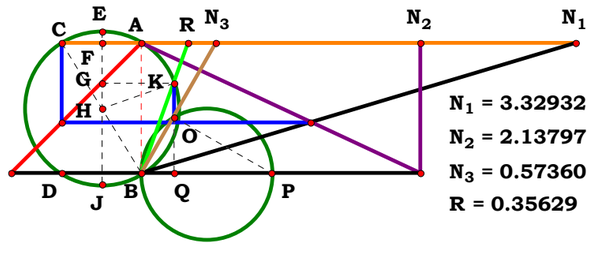
$$\text{Den} := \frac{\left(C^2 + N_u^{2}\right) \cdot \left[A \cdot B \cdot N_u \cdot \left[C^2 \cdot (A+B) + N_u^{2} \cdot (A-B)\right] + A \cdot B \cdot \sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{2} \cdot (A-B)\right]} \cdot \sqrt{N_u \cdot (A+B)}\right]}{\sqrt{\left[\left(C^2 + N_u^{2}\right) \cdot \left[A \cdot B \cdot N_u \cdot \left[C^2 \cdot (A+B) + N_u^{2} \cdot (A-B)\right] + A \cdot B \cdot \sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{2} \cdot (A-B)\right]} \cdot \sqrt{N_u \cdot (A+B)}\right]\right]^2}}$$

$$L := \frac{\text{Num}}{\text{Den}}$$

$\text{Num} = 1$ $\text{Den} = 1$ $L = 1$

$$L - \frac{A \cdot B \cdot N_u^{5} \cdot (A+B) \cdot \sqrt{\left(C^2 + N_u^{2}\right)^2 \cdot \left[A \cdot B \cdot \sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{2} \cdot (A-B)\right]} \cdot \sqrt{N_u \cdot (A+B)} + A \cdot B \cdot N_u \cdot \left[(A+B) \cdot C^2 + (A-B) \cdot N_u^{2}\right]\right]^2}}{\left(C^2 + N_u^{2}\right) \cdot \left[A \cdot B \cdot \sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{2} \cdot (A-B)\right]} \cdot \sqrt{N_u \cdot (A+B)} + A \cdot B \cdot N_u \cdot \left[(A+B) \cdot C^2 + (A-B) \cdot N_u^{2}\right]\right] \cdot \sqrt{A^2 \cdot B^2 \cdot N_u^{10} \cdot (A+B)^2}} = 0$$

4RST10AAB3R1



Unit. $AB := 1$ Given. $N_1 := 3.32932$ $N_2 := 2.13797$ $N_3 := .57360$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2 \cdot N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)}}{\sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{\,4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]} + \sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right)} = 0.356297$$

$$Num := \frac{2 \cdot N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)}}{\sqrt{\left[2 \cdot N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)}\right]^2}}$$

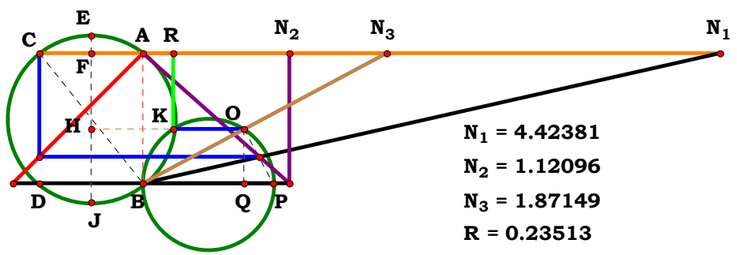
$$Den := \frac{\sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{\,4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]} + \sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right)}{\sqrt{\left[\sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{\,4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]} + \sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^{\,2} \cdot \sqrt{\left[\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) + \sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{\,4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]}\right]^2} \cdot \sqrt{N_u \cdot (A+B)}}{\left[\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) + \sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{\,4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]}\right] \cdot \sqrt{N_u^{\,5} \cdot (A+B)}} = 0$$

4RST10AAB3R2



Unit. $AB := 1$ **Given.** $N_1 := 4.42381$ $N_2 := 1.12096$ $N_3 := 1.87149$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{B^2\cdot C^4+B^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)}-B\cdot\left(C^2+N_u{}^2\right)}{2\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)}=0.235134$$

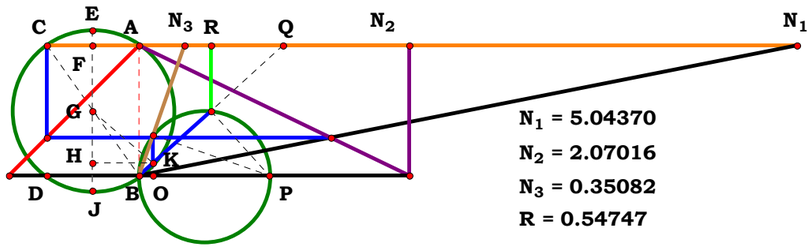
$$Num := \frac{\sqrt{B^2\cdot C^4+B^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)}-B\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[\sqrt{B^2\cdot C^4+B^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)}-B\cdot\left(C^2+N_u{}^2\right)\right]^2}}$$

$$Den := \frac{2\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)}{\sqrt{\left[2\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{\left(2\cdot C^2+2\cdot N_u{}^2\right)^2\cdot(A+B)^2}\cdot\left[\sqrt{B^2\cdot C^4+B^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)}-B\cdot\left(C^2+N_u{}^2\right)\right]}{\sqrt{\left[\sqrt{B^2\cdot C^4+B^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)}-B\cdot\left(C^2+N_u{}^2\right)\right]^2}\cdot\left(2\cdot C^2+2\cdot N_u{}^2\right)\cdot(A+B)}=0$$

4RST10AAB3R3



Unit. $AB := 1$ Given. $N_1 := 5.04370$ $N_2 := 2.07016$ $N_3 := .35082$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2 \cdot {N_u}^4 \cdot (A+B)}{\left(C^2+{N_u}^2\right) \cdot \left[C^2 \cdot (A+B) + {N_u}^2 \cdot (A-B) - \sqrt{(A+B) \cdot \left[C^4 \cdot (A+B) - {N_u}^4 \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot {N_u}^2 \cdot (A-B)\right]}\right]} = 0.54747$$

$$Num := \frac{2 \cdot {N_u}^4 \cdot (A+B)}{\sqrt{\left[2 \cdot {N_u}^4 \cdot (A+B)\right]^2}}$$

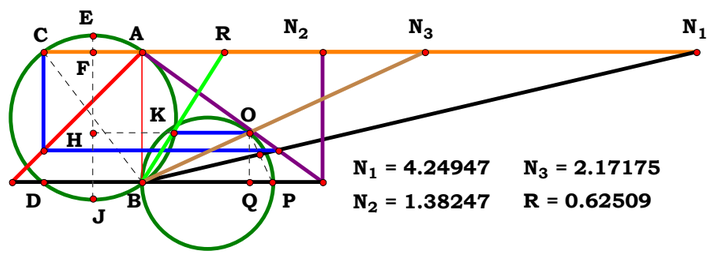
$$Den := \frac{\left(C^2+{N_u}^2\right) \cdot \left[C^2 \cdot (A+B) + {N_u}^2 \cdot (A-B) - \sqrt{(A+B) \cdot \left[C^4 \cdot (A+B) - {N_u}^4 \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot {N_u}^2 \cdot (A-B)\right]}\right]}{\sqrt{\left[\left(C^2+{N_u}^2\right) \cdot \left[C^2 \cdot (A+B) + {N_u}^2 \cdot (A-B) - \sqrt{(A+B) \cdot \left[C^4 \cdot (A+B) - {N_u}^4 \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot {N_u}^2 \cdot (A-B)\right]}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{{N_u}^4 \cdot \sqrt{\left(C^2+{N_u}^2\right)^2 \cdot \left[{N_u}^2 \cdot (A-B) - \sqrt{(A+B) \cdot \left[C^4 \cdot (A+B) - {N_u}^4 \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot {N_u}^2 \cdot (A-B)\right]} + C^2 \cdot (A+B)\right]^2} \cdot (A+B)}{\sqrt{{N_u}^8 \cdot (A+B)^2} \cdot \left(C^2+{N_u}^2\right) \cdot \left[{N_u}^2 \cdot (A-B) - \sqrt{(A+B) \cdot \left[C^4 \cdot (A+B) - {N_u}^4 \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot {N_u}^2 \cdot (A-B)\right]} + C^2 \cdot (A+B)\right]} = 0$$

4RST10AAB3R4



Unit. $AB := 1$ **Given.** $N_1 := 4.24947$ $N_2 := 1.38247$ $N_3 := 2.17175$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{B^2\cdot C^4+B^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)}-B\cdot\left(C^2+N_u{}^2\right)}{2\cdot C\cdot N_u\cdot(A+B)}=0.625087$$

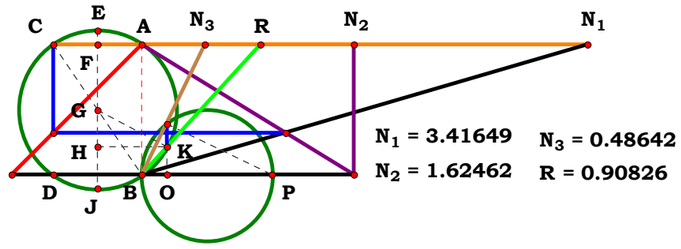
$$Num := \frac{\sqrt{B^2\cdot C^4+B^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)}-B\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[\sqrt{B^2\cdot C^4+B^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)}-B\cdot\left(C^2+N_u{}^2\right)\right]^2}}$$

$$Den := \frac{2\cdot C\cdot N_u\cdot(A+B)}{\sqrt{\left[2\cdot C\cdot N_u\cdot(A+B)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{B^2\cdot C^4+B^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)}-B\cdot\left(C^2+N_u{}^2\right)\right]\cdot\sqrt{C^2\cdot N_u{}^2\cdot(A+B)^2}}{C\cdot N_u\cdot\sqrt{\left[\sqrt{B^2\cdot C^4+B^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(2\cdot A^2+4\cdot A\cdot B+B^2\right)}-B\cdot\left(C^2+N_u{}^2\right)\right]^2}\cdot(A+B)}=0$$

4RST10AAB3R5



Unit. $AB := 1$ Given. $N_1 := 3.41649$ $N_2 := 1.62462$ $N_3 := .48642$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2 \cdot N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)}}{\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) - \sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{\,4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]}} = 0.908272$$

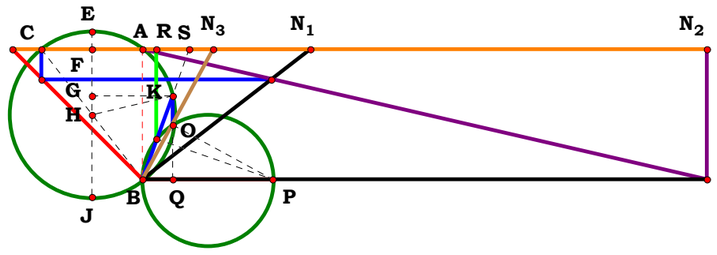
$$Num := \frac{2 \cdot N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)}}{\sqrt{\left[2 \cdot N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)}\right]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) - \sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{\,4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]}}{\sqrt{\left[\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) - \sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{\,4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)} \cdot \sqrt{\left[\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) - \sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{\,4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]}\right]^2}}{\left[\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) - \sqrt{N_u \cdot \left[C^4 \cdot (A+B) - N_u^{\,4} \cdot (3 \cdot A + 7 \cdot B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]}\right] \cdot \sqrt{N_u^{\,5} \cdot (A+B)}} = 0$$



$N_1 = 1.28562$
$N_2 = 4.32695$
$N_3 = 0.54454$
$R = 0.11132$

Unit. $AB := 1$ Given. $N_1 := 1.28562$ $N_2 := 4.32695$ $N_3 := .54454$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2 \cdot N_u^{5} \cdot (A+B)}{\left(C^2+N_u^{2}\right) \cdot \left[\sqrt{-N_u \cdot \left[N_u^{4} \cdot (7 \cdot A+3 \cdot B) - C^4 \cdot (A+B) + 2 \cdot C^2 \cdot N_u^{2} \cdot (A-B)\right]} \cdot \sqrt{N_u \cdot (A+B)} - N_u^{3} \cdot (A-B) + C^2 \cdot N_u \cdot (A+B)\right]} = 0.111319$$

$$Num := \frac{2 \cdot N_u^{5} \cdot (A+B)}{\sqrt{\left[2 \cdot N_u^{5} \cdot (A+B)\right]^2}}$$

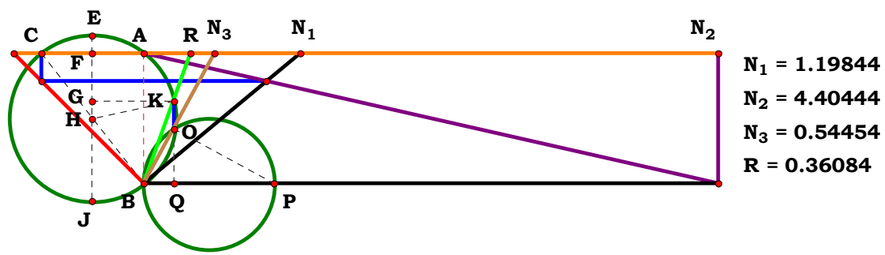
$$Den := \frac{\left(C^2+N_u^{2}\right) \cdot \left[\sqrt{-N_u \cdot \left[N_u^{4} \cdot (7 \cdot A+3 \cdot B) - C^4 \cdot (A+B) + 2 \cdot C^2 \cdot N_u^{2} \cdot (A-B)\right]} \cdot \sqrt{N_u \cdot (A+B)} - N_u^{3} \cdot (A-B) + C^2 \cdot N_u \cdot (A+B)\right]}{\sqrt{\left[\left(C^2+N_u^{2}\right) \cdot \left[\sqrt{-N_u \cdot \left[N_u^{4} \cdot (7 \cdot A+3 \cdot B) - C^4 \cdot (A+B) + 2 \cdot C^2 \cdot N_u^{2} \cdot (A-B)\right]} \cdot \sqrt{N_u \cdot (A+B)} - N_u^{3} \cdot (A-B) + C^2 \cdot N_u \cdot (A+B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^{5} \cdot \sqrt{\left(C^2+N_u^{2}\right)^2 \cdot \left[\sqrt{-N_u \cdot \left[N_u^{4} \cdot (7 \cdot A+3 \cdot B) - C^4 \cdot (A+B) + 2 \cdot C^2 \cdot N_u^{2} \cdot (A-B)\right]} \cdot \sqrt{N_u \cdot (A+B)} - N_u^{3} \cdot (A-B) + C^2 \cdot N_u \cdot (A+B)\right]^2} \cdot (A+B)}{\sqrt{N_u^{10} \cdot (A+B)^2} \cdot \left(C^2+N_u^{2}\right) \cdot \left[\sqrt{-N_u \cdot \left[N_u^{4} \cdot (7 \cdot A+3 \cdot B) - C^4 \cdot (A+B) + 2 \cdot C^2 \cdot N_u^{2} \cdot (A-B)\right]} \cdot \sqrt{N_u \cdot (A+B)} - N_u^{3} \cdot (A-B) + C^2 \cdot N_u \cdot (A+B)\right]} = 0$$

4RST10AAB4R1



Unit. $AB := 1$ Given. $N_1 := 1.19844$ $N_2 := 4.40444$ $N_3 := .54454$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2 \cdot N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)}}{\sqrt{N_u \cdot \left[(A+B) \cdot C^4 + -2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B) - N_u^{\,4} \cdot (7 \cdot A + 3 \cdot B)\right]} + \sqrt{\left[N_u \cdot (A+B)\right]} \cdot \left(C^2 + N_u^{\,2}\right)} = 0.360842$$

$$Num := \frac{2 \cdot N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)}}{\sqrt{\left[2 \cdot N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)}\right]^2}}$$

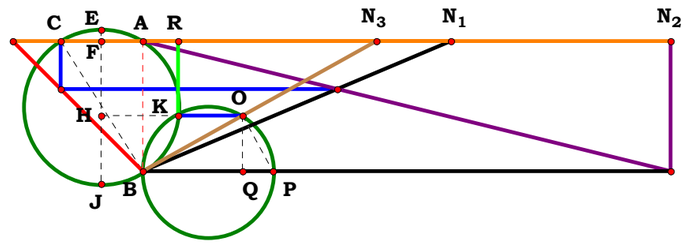
$$Den := \frac{\sqrt{N_u \cdot \left[(A+B) \cdot C^4 + -2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B) - N_u^{\,4} \cdot (7 \cdot A + 3 \cdot B)\right]} + \sqrt{\left[N_u \cdot (A+B)\right]} \cdot \left(C^2 + N_u^{\,2}\right)}{\sqrt{\left[\sqrt{N_u \cdot \left[(A+B) \cdot C^4 + -2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B) - N_u^{\,4} \cdot (7 \cdot A + 3 \cdot B)\right]} + \sqrt{\left[N_u \cdot (A+B)\right]} \cdot \left(C^2 + N_u^{\,2}\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^{\,2} \cdot \sqrt{\left[\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) + \sqrt{-N_u \cdot \left[N_u^{\,4} \cdot (7 \cdot A + 3 \cdot B) - C^4 \cdot (A+B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]}\right]^2} \cdot \sqrt{N_u \cdot (A+B)}}{\left[\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) + \sqrt{-N_u \cdot \left[N_u^{\,4} \cdot (7 \cdot A + 3 \cdot B) - C^4 \cdot (A+B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]}\right] \cdot \sqrt{N_u^{\,5} \cdot (A+B)}} = 0$$

4RST10AAB4R2



$N_1 = 2.36074$
$N_2 = 4.04606$
$N_3 = 1.79401$
$R = 0.27086$

Unit. $AB := 1$ **Given.** $N_1 := 2.36074$ $N_2 := 4.04606$ $N_3 := 1.79401$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A^2\cdot C^4+A^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot\left(C^2+N_u{}^2\right)}{2\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)}=0.270857$$

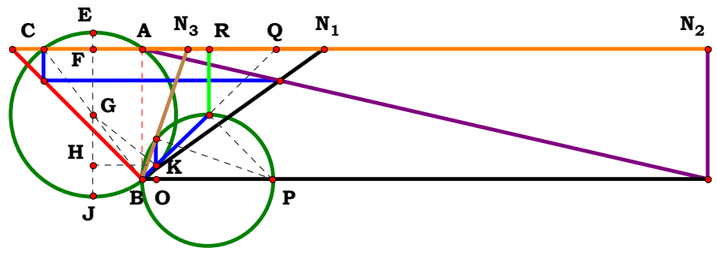
$$\text{Num} := \frac{\sqrt{A^2\cdot C^4+A^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[\sqrt{A^2\cdot C^4+A^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot\left(C^2+N_u{}^2\right)\right]^2}}$$

$$\text{Den} := \frac{2\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)}{\sqrt{\left[2\cdot\left(C^2+N_u{}^2\right)\cdot(A+B)\right]^2}} \qquad L := \frac{\text{Num}}{\text{Den}}$$

$\text{Num} = 1$ $\text{Den} = 1$ $L = 1$

$$L-\frac{\sqrt{\left(2\cdot C^2+2\cdot N_u{}^2\right)^2\cdot(A+B)^2}\cdot\left[\sqrt{A^2\cdot C^4+A^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot\left(C^2+N_u{}^2\right)\right]}{\sqrt{\left[\sqrt{A^2\cdot C^4+A^2\cdot N_u{}^4+4\cdot C\cdot N_u{}^3\cdot(A+B)^2+4\cdot C^3\cdot N_u\cdot(A+B)^2-2\cdot C^2\cdot N_u{}^2\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)}-A\cdot\left(C^2+N_u{}^2\right)\right]^2}\cdot\left(2\cdot C^2+2\cdot N_u{}^2\right)\cdot(A+B)}=0$$

4RST10AAB4R3



$N_1 = 1.39216$
$N_2 = 4.33664$
$N_3 = 0.35082$
$R = 0.51543$

Unit. $AB := 1$ **Given.** $N_1 := 1.39216$ $N_2 := 4.33664$ $N_3 := .35082$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2 \cdot N_u^4 \cdot (A+B)}{\left(C^2 + N_u^2\right) \cdot \left[C^2 \cdot (A+B) - N_u^2 \cdot (A-B) - \sqrt{(A+B) \cdot \left[C^4 \cdot (A+B) - N_u^4 \cdot (7 \cdot A + 3 \cdot B) - 2 \cdot C^2 \cdot N_u^2 \cdot (A-B)\right]}\right]} = 0.51543$$

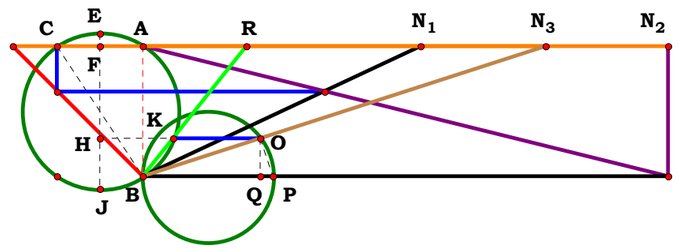
$$Num := \frac{2 \cdot N_u^4 \cdot (A+B)}{\sqrt{\left[2 \cdot N_u^4 \cdot (A+B)\right]^2}}$$

$$Den := \frac{\left(C^2 + N_u^2\right) \cdot \left[C^2 \cdot (A+B) - N_u^2 \cdot (A-B) - \sqrt{(A+B) \cdot \left[C^4 \cdot (A+B) - N_u^4 \cdot (7 \cdot A + 3 \cdot B) - 2 \cdot C^2 \cdot N_u^2 \cdot (A-B)\right]}\right]}{\sqrt{\left[\left(C^2 + N_u^2\right) \cdot \left[C^2 \cdot (A+B) - N_u^2 \cdot (A-B) - \sqrt{(A+B) \cdot \left[C^4 \cdot (A+B) - N_u^4 \cdot (7 \cdot A + 3 \cdot B) - 2 \cdot C^2 \cdot N_u^2 \cdot (A-B)\right]}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^4 \cdot (A+B) \cdot \sqrt{\left(C^2 + N_u^2\right)^2 \cdot \left[C^2 \cdot (A+B) - N_u^2 \cdot (A-B) - \sqrt{(A+B) \cdot \left[C^4 \cdot (A+B) - N_u^4 \cdot (7 \cdot A + 3 \cdot B) - 2 \cdot C^2 \cdot N_u^2 \cdot (A-B)\right]}\right]^2}}{\sqrt{N_u^8 \cdot (A+B)^2} \cdot \left(C^2 + N_u^2\right) \cdot \left[C^2 \cdot (A+B) - N_u^2 \cdot (A-B) - \sqrt{(A+B) \cdot \left[C^4 \cdot (A+B) - N_u^4 \cdot (7 \cdot A + 3 \cdot B) - 2 \cdot C^2 \cdot N_u^2 \cdot (A-B)\right]}\right]} = 0$$



$N_1 = 2.12828$

$N_2 = 4.02669$

$N_3 = 3.09190$

$R = 0.79682$

Unit. $AB := 1$ **Given.** $N_1 := 2.12828$ $N_2 := 4.02669$ $N_3 := 3.09190$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A^2\cdot\left(C^4+{N_u}^4\right)-2\cdot C^2\cdot {N_u}^2\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)+4\cdot C\cdot N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2}-A\cdot\left(C^2+{N_u}^2\right)}{2\cdot C\cdot N_u\cdot(A+B)} = 0.796824$$

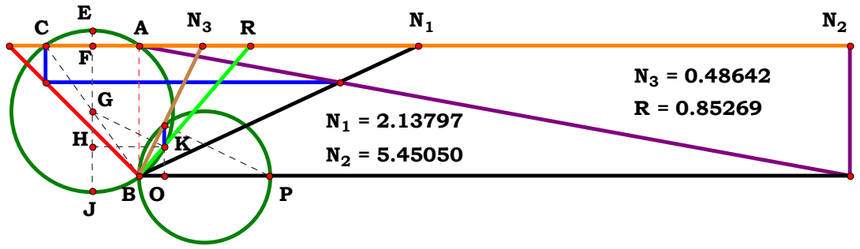
$$Num := \frac{\sqrt{A^2\cdot\left(C^4+{N_u}^4\right)-2\cdot C^2\cdot {N_u}^2\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)+4\cdot C\cdot N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2}-A\cdot\left(C^2+{N_u}^2\right)}{\sqrt{\left[\sqrt{A^2\cdot\left(C^4+{N_u}^4\right)-2\cdot C^2\cdot {N_u}^2\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)+4\cdot C\cdot N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2}-A\cdot\left(C^2+{N_u}^2\right)\right]^2}}$$

$$Den := \frac{2\cdot C\cdot N_u\cdot(A+B)}{\sqrt{\left[2\cdot C\cdot N_u\cdot(A+B)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{A^2\cdot\left(C^4+{N_u}^4\right)-2\cdot C^2\cdot {N_u}^2\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)+4\cdot C\cdot N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2}-A\cdot\left(C^2+{N_u}^2\right)\right]\cdot\sqrt{C^2\cdot {N_u}^2\cdot(A+B)^2}}{C\cdot N_u\cdot(A+B)\cdot\sqrt{\left[\sqrt{A^2\cdot\left(C^4+{N_u}^4\right)-2\cdot C^2\cdot {N_u}^2\cdot\left(A^2+4\cdot A\cdot B+2\cdot B^2\right)+4\cdot C\cdot N_u\cdot\left(C^2+{N_u}^2\right)\cdot(A+B)^2}-A\cdot\left(C^2+{N_u}^2\right)\right]^2}} = 0$$

4RST10AAB4R5



Unit. $AB := 1$ Given. $N_1 := 2.13797$ $N_2 := 5.45050$ $N_3 := .48642$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2 \cdot N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)}}{\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) - \sqrt{N_u \cdot \left[(A+B) \cdot C^4 - 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B) - N_u^{\,4} \cdot (7 \cdot A + 3 \cdot B)\right]}} = 0.852704$$

$$Num := \frac{2 \cdot N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)}}{\sqrt{\left[2 \cdot N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)}\right]^2}}$$

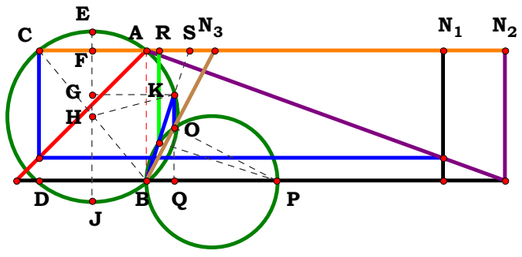
$$Den := \frac{\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) - \sqrt{N_u \cdot \left[(A+B) \cdot C^4 - 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B) - N_u^{\,4} \cdot (7 \cdot A + 3 \cdot B)\right]}}{\sqrt{\left[\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) - \sqrt{N_u \cdot \left[(A+B) \cdot C^4 - 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B) - N_u^{\,4} \cdot (7 \cdot A + 3 \cdot B)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u^{\,2} \cdot \sqrt{N_u \cdot (A+B)} \cdot \sqrt{\left[\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) - \sqrt{-N_u \cdot \left[N_u^{\,4} \cdot (7 \cdot A + 3 \cdot B) - C^4 \cdot (A+B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]}\right]^2}}{\left[\sqrt{N_u \cdot (A+B)} \cdot \left(C^2 + N_u^{\,2}\right) - \sqrt{-N_u \cdot \left[N_u^{\,4} \cdot (7 \cdot A + 3 \cdot B) - C^4 \cdot (A+B) + 2 \cdot C^2 \cdot N_u^{\,2} \cdot (A-B)\right]}\right] \cdot \sqrt{N_u^{\,5} \cdot (A+B)}} = 0$$

4RST10AAB5R0



$N_1 = 2.27357$
$N_2 = 2.74817$
$N_3 = 0.52517$
$R = 0.09789$

Unit. $AB := 1$ Given. $N_1 := 2.27357$ $N_2 := 2.74817$ $N_3 := .52517$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{A}\right)^2\cdot {N_u}^4}{\left(C^2+{N_u}^2\right)\cdot\left[\sqrt{A}\cdot\sqrt{A\cdot C^4-{N_u}^4\cdot(3\cdot A+4\cdot B)+2\cdot C^2\cdot {N_u}^2\cdot(A-2\cdot B)}+A\cdot C^2+{N_u}^2\cdot(A-2\cdot B)\right]} = 0.097888$$

$$Num := \frac{2\cdot\left(\sqrt{A}\right)^2\cdot {N_u}^4}{\sqrt{\left[2\cdot\left(\sqrt{A}\right)^2\cdot {N_u}^4\right]^2}}$$

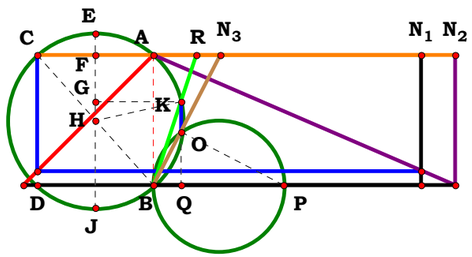
$$Den := \frac{\left(C^2+{N_u}^2\right)\cdot\left[\sqrt{A}\cdot\sqrt{A\cdot C^4-{N_u}^4\cdot(3\cdot A+4\cdot B)+2\cdot C^2\cdot {N_u}^2\cdot(A-2\cdot B)}+A\cdot C^2+{N_u}^2\cdot(A-2\cdot B)\right]}{\sqrt{\left[\left(C^2+{N_u}^2\right)\cdot\left[\sqrt{A}\cdot\sqrt{A\cdot C^4-{N_u}^4\cdot(3\cdot A+4\cdot B)+2\cdot C^2\cdot {N_u}^2\cdot(A-2\cdot B)}+A\cdot C^2+{N_u}^2\cdot(A-2\cdot B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A\cdot {N_u}^4\cdot\sqrt{\left(C^2+{N_u}^2\right)^2\cdot\left[{N_u}^2\cdot(A-2\cdot B)+\sqrt{A}\cdot\sqrt{A\cdot C^4-{N_u}^4\cdot(3\cdot A+4\cdot B)+2\cdot C^2\cdot {N_u}^2\cdot(A-2\cdot B)}+A\cdot C^2\right]^2}}{\sqrt{A^2\cdot {N_u}^8}\cdot\left(C^2+{N_u}^2\right)\cdot\left[{N_u}^2\cdot(A-2\cdot B)+\sqrt{A}\cdot\sqrt{A\cdot C^4-{N_u}^4\cdot(3\cdot A+4\cdot B)+2\cdot C^2\cdot {N_u}^2\cdot(A-2\cdot B)}+A\cdot C^2\right]} = 0$$

4RST10AAB5R1



$N_1 = 2.05079$
$N_2 = 2.31231$
$N_3 = 0.51548$
$R = 0.32778$

Unit. $AB := 1$ **Given.** $N_1 := 2.05079$ $N_2 := 2.31231$ $N_3 := .51548$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}}{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)+\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot\left(C^2-{N_u}^2\right)\cdot\left(C^2+3\cdot{N_u}^2\right)-4\cdot B\cdot{N_u}^2\cdot\left(C^2+{N_u}^2\right)\right]}} = 0.327778$$

$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}\right]^2}}$$

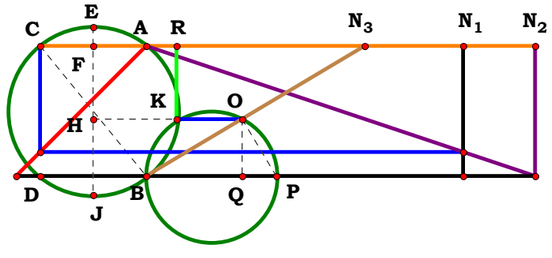
$$Den := \frac{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)+\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot\left(C^2-{N_u}^2\right)\cdot\left(C^2+3\cdot{N_u}^2\right)-4\cdot B\cdot{N_u}^2\cdot\left(C^2+{N_u}^2\right)\right]}}{\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)+\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot\left(C^2-{N_u}^2\right)\cdot\left(C^2+3\cdot{N_u}^2\right)-4\cdot B\cdot{N_u}^2\cdot\left(C^2+{N_u}^2\right)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{{N_u}^{\frac{5}{2}}\cdot\sqrt{A\cdot B}\cdot\sqrt{\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot\left(C^2-{N_u}^2\right)\cdot\left(C^2+3\cdot{N_u}^2\right)-4\cdot B\cdot{N_u}^2\cdot\left(C^2+{N_u}^2\right)\right]}+\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(C^2+{N_u}^2\right)\right]^2}}{\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot\left(C^2-{N_u}^2\right)\cdot\left(C^2+3\cdot{N_u}^2\right)-4\cdot B\cdot{N_u}^2\cdot\left(C^2+{N_u}^2\right)\right]}+\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(C^2+{N_u}^2\right)\right]\cdot\sqrt{A\cdot B\cdot{N_u}^5}} = 0$$

4RST10AAB5R2



$N_1 = 2.42854$
$N_2 = 2.98063$
$N_3 = 1.67778$
$R = 0.23475$

Unit. $AB := 1$ **Given.** $N_1 := 2.42854$ $N_2 := 2.98063$ $N_3 := 1.67778$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{4\cdot A^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)+B^2\cdot\left(C^2+N_u{}^2\right)^2}-B\cdot\left(C^2+N_u{}^2\right)}{2\cdot A\cdot\left(C^2+N_u{}^2\right)} = 0.234749$$

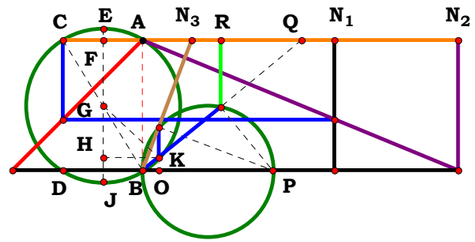
$$Num := \frac{\sqrt{4\cdot A^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)+B^2\cdot\left(C^2+N_u{}^2\right)^2}-B\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[\sqrt{4\cdot A^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)+B^2\cdot\left(C^2+N_u{}^2\right)^2}-B\cdot\left(C^2+N_u{}^2\right)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[2\cdot A\cdot\left(C^2+N_u{}^2\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - -\frac{\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2}\cdot\left[B\cdot\left(C^2+N_u{}^2\right)-\sqrt{B^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot A^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)}\right]}{A\cdot\left(C^2+N_u{}^2\right)\cdot\sqrt{\left[B\cdot\left(C^2+N_u{}^2\right)-\sqrt{B^2\cdot\left(C^2+N_u{}^2\right)^2+4\cdot A^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+N_u{}^2\right)}\right]^2}} = 0$$

4RST10AAB5R3



$N_1 = 1.46965$
$N_2 = 2.41885$
$N_3 = 0.37988$
$R = 0.59906$

Unit. $AB := 1$ **Given.** $N_1 := 1.46965$ $N_2 := 2.41885$ $N_3 := .37988$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{A}\right)^2\cdot N_u{}^4}{\left(C^2+N_u{}^2\right)\cdot\left[A\cdot C^2-\sqrt{A}\cdot\sqrt{A\cdot\left(C^2-N_u{}^2\right)\cdot\left(C^2+3\cdot N_u{}^2\right)-4\cdot B\cdot N_u{}^2\cdot\left(C^2+N_u{}^2\right)}+N_u{}^2\cdot(A-2\cdot B)\right]}=0.599061$$

$$Num := \frac{2\cdot\left(\sqrt{A}\right)^2\cdot N_u{}^4}{\sqrt{\left[2\cdot\left(\sqrt{A}\right)^2\cdot N_u{}^4\right]^2}}$$

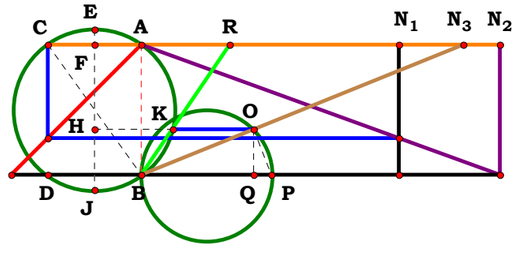
$$Den := \frac{\left(C^2+N_u{}^2\right)\cdot\left[A\cdot C^2-\sqrt{A}\cdot\sqrt{A\cdot\left(C^2-N_u{}^2\right)\cdot\left(C^2+3\cdot N_u{}^2\right)-4\cdot B\cdot N_u{}^2\cdot\left(C^2+N_u{}^2\right)}+N_u{}^2\cdot(A-2\cdot B)\right]}{\sqrt{\left[\left(C^2+N_u{}^2\right)\cdot\left[A\cdot C^2-\sqrt{A}\cdot\sqrt{A\cdot\left(C^2-N_u{}^2\right)\cdot\left(C^2+3\cdot N_u{}^2\right)-4\cdot B\cdot N_u{}^2\cdot\left(C^2+N_u{}^2\right)}+N_u{}^2\cdot(A-2\cdot B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L-\frac{A\cdot N_u{}^4\cdot\sqrt{\left(C^2+N_u{}^2\right)^2\cdot\left[N_u{}^2\cdot(A-2\cdot B)-\sqrt{A}\cdot\sqrt{A\cdot\left(C^2-N_u{}^2\right)\cdot\left(C^2+3\cdot N_u{}^2\right)-4\cdot B\cdot N_u{}^2\cdot\left(C^2+N_u{}^2\right)}+A\cdot C^2\right]^2}}{\sqrt{A^2\cdot N_u{}^8}\cdot\left(C^2+N_u{}^2\right)\cdot\left[N_u{}^2\cdot(A-2\cdot B)-\sqrt{A}\cdot\sqrt{A\cdot\left(C^2-N_u{}^2\right)\cdot\left(C^2+3\cdot N_u{}^2\right)-4\cdot B\cdot N_u{}^2\cdot\left(C^2+N_u{}^2\right)}+A\cdot C^2\right]}=0$$

4RST10AAB5R4



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 2.47201$
$R = 0.68280$

Unit. $AB := 1$ Given. $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := 2.47201$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{4\cdot A^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+{N_u}^2\right)+B^2\cdot\left(C^2+{N_u}^2\right)^2}-B\cdot\left(C^2+{N_u}^2\right)}{2\cdot A\cdot C\cdot N_u}=0.682803$$

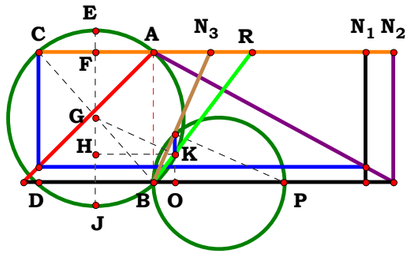
$$Num := \frac{\sqrt{4\cdot A^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+{N_u}^2\right)+B^2\cdot\left(C^2+{N_u}^2\right)^2}-B\cdot\left(C^2+{N_u}^2\right)}{\sqrt{\left[\sqrt{4\cdot A^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+{N_u}^2\right)+B^2\cdot\left(C^2+{N_u}^2\right)^2}-B\cdot\left(C^2+{N_u}^2\right)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot C\cdot N_u}{\sqrt{\left(2\cdot A\cdot C\cdot N_u\right)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{4\cdot A^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+{N_u}^2\right)+B^2\cdot\left(C^2+{N_u}^2\right)^2}-B\cdot\left(C^2+{N_u}^2\right)\right]\cdot\sqrt{A^2\cdot C^2\cdot {N_u}^2}}{A\cdot C\cdot N_u\cdot\sqrt{\left[\sqrt{4\cdot A^2\cdot C\cdot N_u\cdot\left(C^2-C\cdot N_u+{N_u}^2\right)+B^2\cdot\left(C^2+{N_u}^2\right)^2}-B\cdot\left(C^2+{N_u}^2\right)\right]^2}}=0$$

4RST10AAB5R5



$N_1 = 1.62462$
$N_2 = 1.83771$
$N_3 = 0.43800$
$R = 0.75214$

Unit. $AB := 1$ **Given.** $N_1 := 1.62462$ $N_2 := 1.83771$ $N_3 := .43800$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}}{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot C^4-{N_u}^4\cdot(3\cdot A+4\cdot B)+2\cdot C^2\cdot{N_u}^2\cdot(A-2\cdot B)\right]}} = 0.752138$$

$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}\right]^2}}$$

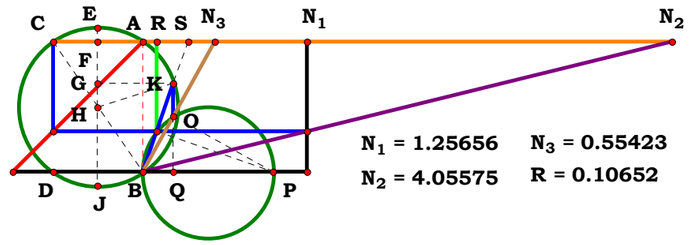
$$Den := \frac{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot C^4-{N_u}^4\cdot(3\cdot A+4\cdot B)+2\cdot C^2\cdot{N_u}^2\cdot(A-2\cdot B)\right]}}{\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot C^4-{N_u}^4\cdot(3\cdot A+4\cdot B)+2\cdot C^2\cdot{N_u}^2\cdot(A-2\cdot B)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{{N_u}^{\frac{5}{2}}\cdot\sqrt{A\cdot B}\cdot\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot C^4-{N_u}^4\cdot(3\cdot A+4\cdot B)+2\cdot C^2\cdot{N_u}^2\cdot(A-2\cdot B)\right]}\right]^2}}{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{B}\cdot\sqrt{N_u\cdot\left[A\cdot C^4-{N_u}^4\cdot(3\cdot A+4\cdot B)+2\cdot C^2\cdot{N_u}^2\cdot(A-2\cdot B)\right]}\right]\cdot\sqrt{A\cdot B\cdot{N_u}^5}} = 0$$

4RST10AB6R0



Unit. $AB := 1$ Given. $N_1 := 1.25656$ $N_2 := 4.05575$ $N_3 := .55423$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{A}\right)^2\cdot {N_u}^4}{\left(C^2+{N_u}^2\right)\cdot\left[\sqrt{A}\cdot\sqrt{A\cdot C^4-A\cdot {N_u}^2\cdot\left(2\cdot C^2+7\cdot {N_u}^2\right)+4\cdot B\cdot {N_u}^2\cdot\left(C^2+{N_u}^2\right)}+A\cdot C^2-{N_u}^2\cdot(A-2\cdot B)\right]} = 0.106528$$

$$Num := \frac{2\cdot\left(\sqrt{A}\right)^2\cdot {N_u}^4}{\sqrt{\left[2\cdot\left(\sqrt{A}\right)^2\cdot {N_u}^4\right]^2}}$$

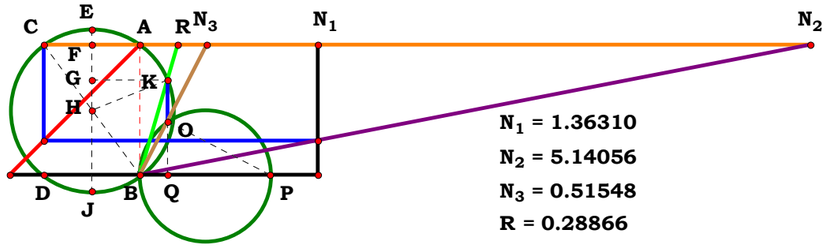
$$Den := \frac{\left(C^2+{N_u}^2\right)\cdot\left[\sqrt{A}\cdot\sqrt{A\cdot C^4-A\cdot {N_u}^2\cdot\left(2\cdot C^2+7\cdot {N_u}^2\right)+4\cdot B\cdot {N_u}^2\cdot\left(C^2+{N_u}^2\right)}+A\cdot C^2-{N_u}^2\cdot(A-2\cdot B)\right]}{\sqrt{\left[\left(C^2+{N_u}^2\right)\cdot\left[\sqrt{A}\cdot\sqrt{A\cdot C^4-A\cdot {N_u}^2\cdot\left(2\cdot C^2+7\cdot {N_u}^2\right)+4\cdot B\cdot {N_u}^2\cdot\left(C^2+{N_u}^2\right)}+A\cdot C^2-{N_u}^2\cdot(A-2\cdot B)\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{A\cdot {N_u}^4\cdot\sqrt{\left(C^2+{N_u}^2\right)^2\cdot\left[\sqrt{A}\cdot\sqrt{A\cdot C^4-A\cdot {N_u}^2\cdot\left(2\cdot C^2+7\cdot {N_u}^2\right)+4\cdot B\cdot {N_u}^2\cdot\left(C^2+{N_u}^2\right)}-{N_u}^2\cdot(A-2\cdot B)+A\cdot C^2\right]^2}}{\sqrt{A^2\cdot {N_u}^8}\cdot\left(C^2+{N_u}^2\right)\cdot\left[\sqrt{A}\cdot\sqrt{A\cdot C^4-A\cdot {N_u}^2\cdot\left(2\cdot C^2+7\cdot {N_u}^2\right)+4\cdot B\cdot {N_u}^2\cdot\left(C^2+{N_u}^2\right)}-{N_u}^2\cdot(A-2\cdot B)+A\cdot C^2\right]} = 0$$

4RST10AB6R1



Unit. $AB := 1$ **Given.** $N_1 := 1.36310$ $N_2 := 5.14056$ $N_3 := .51548$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}}{\sqrt{B}\cdot\sqrt{N_u\cdot\left(A\cdot C^4-7\cdot A\cdot N_u{}^4+4\cdot B\cdot N_u{}^4-2\cdot A\cdot C^2\cdot N_u{}^2+4\cdot B\cdot C^2\cdot N_u{}^2\right)}+\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(C^2+N_u{}^2\right)} = 0.288656$$

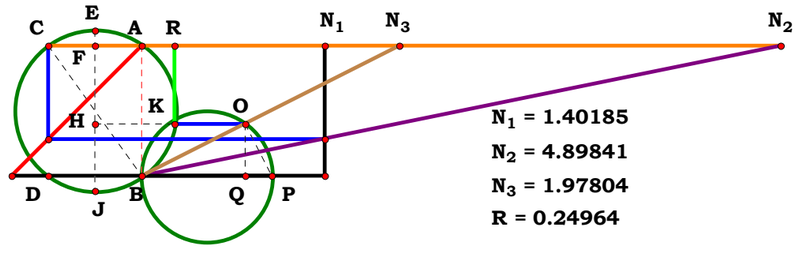
$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}\right]^2}}$$

$$Den := \frac{\sqrt{B}\cdot\sqrt{N_u\cdot\left(A\cdot C^4-7\cdot A\cdot N_u{}^4+4\cdot B\cdot N_u{}^4-2\cdot A\cdot C^2\cdot N_u{}^2+4\cdot B\cdot C^2\cdot N_u{}^2\right)}+\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left(A\cdot C^4-7\cdot A\cdot N_u{}^4+4\cdot B\cdot N_u{}^4-2\cdot A\cdot C^2\cdot N_u{}^2+4\cdot B\cdot C^2\cdot N_u{}^2\right)}+\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(C^2+N_u{}^2\right)\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L - \frac{N_u{}^{\frac{5}{2}}\cdot\sqrt{A\cdot B}\cdot\sqrt{\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left(A\cdot C^4-7\cdot A\cdot N_u{}^4+4\cdot B\cdot N_u{}^4-2\cdot A\cdot C^2\cdot N_u{}^2+4\cdot B\cdot C^2\cdot N_u{}^2\right)}+\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(C^2+N_u{}^2\right)\right]^2}}{\left[\sqrt{B}\cdot\sqrt{N_u\cdot\left(A\cdot C^4-7\cdot A\cdot N_u{}^4+4\cdot B\cdot N_u{}^4-2\cdot A\cdot C^2\cdot N_u{}^2+4\cdot B\cdot C^2\cdot N_u{}^2\right)}+\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(C^2+N_u{}^2\right)\right]\cdot\sqrt{A\cdot B\cdot N_u{}^5}} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 1.40185$ $N_2 := 4.89841$ $N_3 := 1.97804$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)-B\cdot\left(C^2+N_u{}^2\right)^2\cdot(2\cdot A-B)}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)}{2\cdot A\cdot\left(C^2+N_u{}^2\right)}=0.249644$$

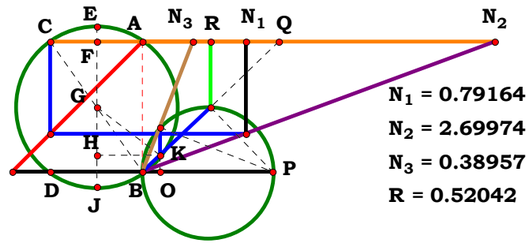
$$Num := \frac{\sqrt{A^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)-B\cdot\left(C^2+N_u{}^2\right)^2\cdot(2\cdot A-B)}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)}{\sqrt{\left[\sqrt{A^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)-B\cdot\left(C^2+N_u{}^2\right)^2\cdot(2\cdot A-B)}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot\left(C^2+N_u{}^2\right)}{\sqrt{\left[2\cdot A\cdot\left(C^2+N_u{}^2\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{A^2\cdot\left(C^2+N_u{}^2\right)^2}\cdot\left[\sqrt{A^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)-B\cdot\left(C^2+N_u{}^2\right)^2\cdot(2\cdot A-B)}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)\right]}{A\cdot\sqrt{\left[\sqrt{A^2\cdot\left(C^4+4\cdot C^3\cdot N_u-2\cdot C^2\cdot N_u{}^2+4\cdot C\cdot N_u{}^3+N_u{}^4\right)-B\cdot\left(C^2+N_u{}^2\right)^2\cdot(2\cdot A-B)}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)\right]^2}\cdot\left(C^2+N_u{}^2\right)}=0$$

4RST10AB6R3



Unit. $AB := 1$ Given. $N_1 := .79164$ $N_2 := 2.69974$ $N_3 := .38957$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{A}\right)^2\cdot N_u{}^4}{\left(C^2+N_u{}^2\right)\cdot\left[A\cdot C^2-N_u{}^2\cdot(A-2\cdot B)-\sqrt{A}\cdot\sqrt{A\cdot C^4-N_u{}^4\cdot(7\cdot A-4\cdot B)-2\cdot C^2\cdot N_u{}^2\cdot(A-2\cdot B)}\right]} = 0.520417$$

$$Num := \frac{2\cdot\left(\sqrt{A}\right)^2\cdot N_u{}^4}{\sqrt{\left[2\cdot\left(\sqrt{A}\right)^2\cdot N_u{}^4\right]^2}}$$

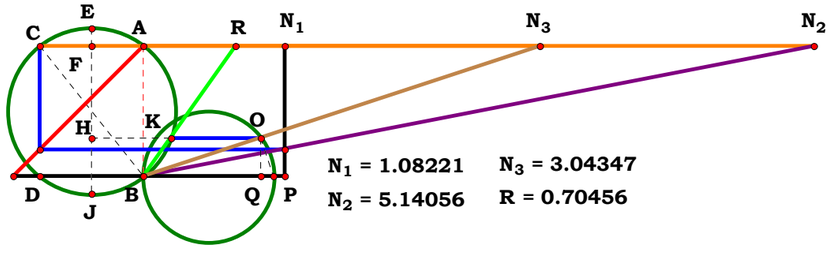
$$Den := \frac{\left(C^2+N_u{}^2\right)\cdot\left[A\cdot C^2-N_u{}^2\cdot(A-2\cdot B)-\sqrt{A}\cdot\sqrt{A\cdot C^4-N_u{}^4\cdot(7\cdot A-4\cdot B)-2\cdot C^2\cdot N_u{}^2\cdot(A-2\cdot B)}\right]}{\sqrt{\left[\left(C^2+N_u{}^2\right)\cdot\left[A\cdot C^2-N_u{}^2\cdot(A-2\cdot B)-\sqrt{A}\cdot\sqrt{A\cdot C^4-N_u{}^4\cdot(7\cdot A-4\cdot B)-2\cdot C^2\cdot N_u{}^2\cdot(A-2\cdot B)}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left(\sqrt{A}\right)^2\cdot N_u{}^4\cdot\sqrt{\left(C^2+N_u{}^2\right)^2\cdot\left[N_u{}^2\cdot(A-2\cdot B)+\sqrt{A}\cdot\sqrt{A\cdot C^4-N_u{}^4\cdot(7\cdot A-4\cdot B)-2\cdot C^2\cdot N_u{}^2\cdot(A-2\cdot B)}-A\cdot C^2\right]^2}}{\sqrt{A^2\cdot N_u{}^8}\cdot\left(C^2+N_u{}^2\right)\cdot\left[A\cdot C^2-\sqrt{A}\cdot\sqrt{A\cdot C^4-N_u{}^4\cdot(7\cdot A-4\cdot B)-2\cdot C^2\cdot N_u{}^2\cdot(A-2\cdot B)}-A\cdot N_u{}^2+2\cdot B\cdot N_u{}^2\right]} = 0$$

4RST10AB6R4



Unit. $AB := 1$ **Given.** $N_1 := 1.08221$ $N_2 := 5.14056$ $N_3 := 3.04347$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A^2\cdot C^4+2\cdot A^2\cdot C^2\cdot N_u\cdot\left(2\cdot C-N_u\right)+A^2\cdot N_u{}^3\cdot\left(4\cdot C+N_u\right)-B\cdot\left(C^2+N_u{}^2\right)^2\cdot(2\cdot A-B)}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)}{2\cdot N_u\cdot A\cdot C}=0.704559$$

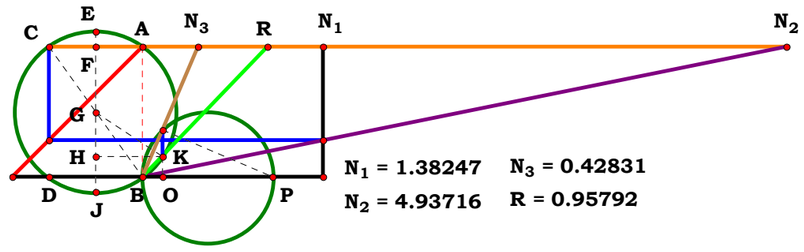
$$Num := \frac{\sqrt{A^2\cdot C^4+2\cdot A^2\cdot C^2\cdot N_u\cdot\left(2\cdot C-N_u\right)+A^2\cdot N_u{}^3\cdot\left(4\cdot C+N_u\right)-B\cdot\left(C^2+N_u{}^2\right)^2\cdot(2\cdot A-B)}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)}{\sqrt{\left[\sqrt{A^2\cdot C^4+2\cdot A^2\cdot C^2\cdot N_u\cdot\left(2\cdot C-N_u\right)+A^2\cdot N_u{}^3\cdot\left(4\cdot C+N_u\right)-B\cdot\left(C^2+N_u{}^2\right)^2\cdot(2\cdot A-B)}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)\right]^2}}$$

$$Den := \frac{2\cdot N_u\cdot A\cdot C}{\sqrt{\left(2\cdot N_u\cdot A\cdot C\right)^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{A^2\cdot C^2\cdot N_u{}^2}\cdot\left[\sqrt{A^2\cdot C^4+2\cdot A^2\cdot C^2\cdot N_u\cdot\left(2\cdot C-N_u\right)+A^2\cdot N_u{}^3\cdot\left(4\cdot C+N_u\right)-B\cdot\left(C^2+N_u{}^2\right)^2\cdot(2\cdot A-B)}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)\right]}{A\cdot C\cdot N_u\cdot\sqrt{\left[\sqrt{A^2\cdot C^4+2\cdot A^2\cdot C^2\cdot N_u\cdot\left(2\cdot C-N_u\right)+A^2\cdot N_u{}^3\cdot\left(4\cdot C+N_u\right)-B\cdot\left(C^2+N_u{}^2\right)^2\cdot(2\cdot A-B)}-C^2\cdot(A-B)-N_u{}^2\cdot(A-B)\right]^2}}=0$$

4RST10AB6R5



Unit. $AB := 1$ **Given.** $N_1 := 1.38247$ $N_2 := 4.93716$ $N_3 := .42831$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}}{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{B}\cdot\sqrt{-N_u\cdot\left[{N_u}^4\cdot(7\cdot A-4\cdot B)-A\cdot C^4+2\cdot C^2\cdot{N_u}^2\cdot(A-2\cdot B)\right]}}=0.957918$$

$$Num := \frac{2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}}{\sqrt{\left[2\cdot\left(\sqrt{N_u}\right)^5\cdot\sqrt{A\cdot B}\right]^2}}$$

$$Den := \frac{\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{B}\cdot\sqrt{-N_u\cdot\left[{N_u}^4\cdot(7\cdot A-4\cdot B)-A\cdot C^4+2\cdot C^2\cdot{N_u}^2\cdot(A-2\cdot B)\right]}}{\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{B}\cdot\sqrt{-N_u\cdot\left[{N_u}^4\cdot(7\cdot A-4\cdot B)-A\cdot C^4+2\cdot C^2\cdot{N_u}^2\cdot(A-2\cdot B)\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L-\frac{{N_u}^{\frac{5}{2}}\cdot\sqrt{A\cdot B}\cdot\sqrt{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{B}\cdot\sqrt{-N_u\cdot\left[{N_u}^4\cdot(7\cdot A-4\cdot B)-A\cdot C^4+2\cdot C^2\cdot{N_u}^2\cdot(A-2\cdot B)\right]}\right]^2}}{\left[\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(C^2+{N_u}^2\right)-\sqrt{B}\cdot\sqrt{-N_u\cdot\left[{N_u}^4\cdot(7\cdot A-4\cdot B)-A\cdot C^4+2\cdot C^2\cdot{N_u}^2\cdot(A-2\cdot B)\right]}\right]\cdot\sqrt{A\cdot B\cdot{N_u}^5}}=0$$

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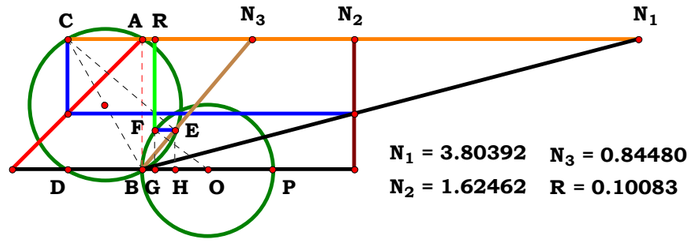

Unit. $AB := 1$ **Given.** $N_1 := 3.80392$ $N_2 := 1.62462$ $N_3 := .84480$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{B\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(B\cdot N_u{}^2-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot N_u{}^2+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}}{2\cdot\left(C^2+N_u{}^2\right)\cdot B}=0.100834$$

$$Num := \frac{B\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(B\cdot N_u{}^2-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot N_u{}^2+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}}{\sqrt{\left[B\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(B\cdot N_u{}^2-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot N_u{}^2+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}\right]^2}}$$

$$Den := \frac{2\cdot\left(C^2+N_u{}^2\right)\cdot B}{\sqrt{\left[2\cdot\left(C^2+N_u{}^2\right)\cdot B\right]^2}} \qquad L := \frac{Num}{Den}$$

Num = 1 **Den** = 1 **L** = 1

$$L-\frac{\left[B\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(B\cdot N_u{}^2-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot N_u{}^2+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}\right]\cdot\sqrt{B^2\cdot\left(2\cdot C^2+2\cdot N_u{}^2\right)^2}}{B\cdot\left(2\cdot C^2+2\cdot N_u{}^2\right)\cdot\sqrt{\left[B\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(B\cdot N_u{}^2-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot N_u{}^2+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}\right]^2}}=0$$

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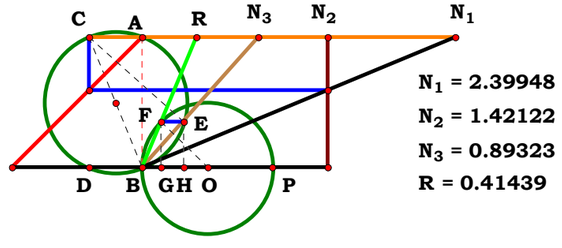

$N_1 = 2.39948$
$N_2 = 1.42122$
$N_3 = 0.89323$
$R = 0.41439$

Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := .89323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{B\cdot\left(C^2+{N_u}^2\right)-\sqrt{\left(B\cdot{N_u}^2-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot{N_u}^2+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}}{2\cdot C\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)}=0.414392$$

$$Num := \frac{B\cdot\left(C^2+{N_u}^2\right)-\sqrt{\left(B\cdot{N_u}^2-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot{N_u}^2+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}}{\sqrt{\left[B\cdot\left(C^2+{N_u}^2\right)-\sqrt{\left(B\cdot{N_u}^2-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot{N_u}^2+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}\right]^2}}$$

$$Den := \frac{2\cdot C\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)}{\sqrt{\left[2\cdot C\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[B\cdot\left(C^2+{N_u}^2\right)-\sqrt{\left(B\cdot{N_u}^2-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot{N_u}^2+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}\right]\cdot\sqrt{C^2\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)^2}}{C\cdot\sqrt{\left[B\cdot\left(C^2+{N_u}^2\right)-\sqrt{\left(B\cdot{N_u}^2-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot{N_u}^2+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}\right]^2}\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)}=0$$

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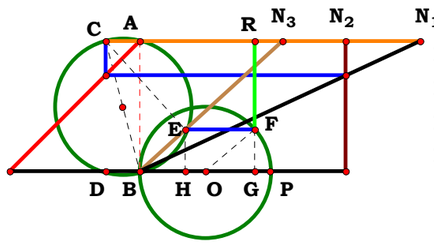


$N_1 = 2.14765$

$N_2 = 1.57619$

$N_3 = 1.09663$

$R = 0.88291$

Unit. $AB := 1$ **Given.** $N_1 := 2.14765$ $N_2 := 1.57619$ $N_3 := 1.09663$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

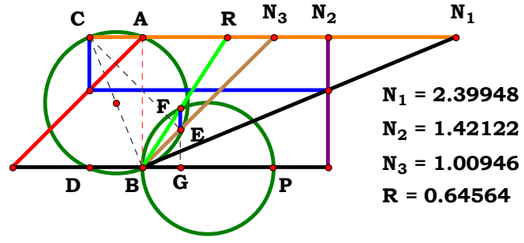
$$\frac{\sqrt{\left(B\cdot {N_u}^2 - B\cdot C^2 - 2\cdot A\cdot C\cdot N_u + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2 + B\cdot {N_u}^2 + 2\cdot A\cdot C\cdot N_u - 2\cdot B\cdot C\cdot N_u\right)} + B\cdot\left(C^2 + {N_u}^2\right)}{2\cdot\left(C^2 + {N_u}^2\right)\cdot B} = 0.882908$$

$$Num := \frac{\sqrt{\left(B\cdot {N_u}^2 - B\cdot C^2 - 2\cdot A\cdot C\cdot N_u + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2 + B\cdot {N_u}^2 + 2\cdot A\cdot C\cdot N_u - 2\cdot B\cdot C\cdot N_u\right)} + B\cdot\left(C^2 + {N_u}^2\right)}{\sqrt{\left[\sqrt{\left(B\cdot {N_u}^2 - B\cdot C^2 - 2\cdot A\cdot C\cdot N_u + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2 + B\cdot {N_u}^2 + 2\cdot A\cdot C\cdot N_u - 2\cdot B\cdot C\cdot N_u\right)} + B\cdot\left(C^2 + {N_u}^2\right)\right]^2}}$$

$$Den := \frac{2\cdot\left(C^2 + {N_u}^2\right)\cdot B}{\sqrt{\left[2\cdot\left(C^2 + {N_u}^2\right)\cdot B\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{\left(B\cdot {N_u}^2 - B\cdot C^2 - 2\cdot A\cdot C\cdot N_u + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2 + B\cdot {N_u}^2 + 2\cdot A\cdot C\cdot N_u - 2\cdot B\cdot C\cdot N_u\right)} + B\cdot\left(C^2 + {N_u}^2\right)\right]\cdot\sqrt{B^2\cdot\left(2\cdot C^2 + 2\cdot {N_u}^2\right)^2}}{B\cdot\left(2\cdot C^2 + 2\cdot {N_u}^2\right)\cdot\sqrt{\left[\sqrt{\left(B\cdot {N_u}^2 - B\cdot C^2 - 2\cdot A\cdot C\cdot N_u + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2 + B\cdot {N_u}^2 + 2\cdot A\cdot C\cdot N_u - 2\cdot B\cdot C\cdot N_u\right)} + B\cdot\left(C^2 + {N_u}^2\right)\right]^2}} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 2.39948$ $N_2 := 1.42122$ $N_3 := 1.00946$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right]}{\sqrt{N_u \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right) \cdot \left[B \cdot C^2 - {N_u}^2 \cdot (A - 2 \cdot B) - B \cdot C \cdot N_u\right]}} = 0.645641$$

$$Num := \frac{N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right]}{\sqrt{\left[N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right]\right]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right) \cdot \left[B \cdot C^2 - {N_u}^2 \cdot (A - 2 \cdot B) - B \cdot C \cdot N_u\right]}}{\sqrt{\left[\sqrt{N_u \cdot \left(B \cdot C + A \cdot N_u - B \cdot N_u\right) \cdot \left[B \cdot C^2 - {N_u}^2 \cdot (A - 2 \cdot B) - B \cdot C \cdot N_u\right]}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot \left[B \cdot C + N_u \cdot (A - B)\right]}{\sqrt{{N_u}^2 \cdot \left[B \cdot C + N_u \cdot (A - B)\right]^2}} = 0$$

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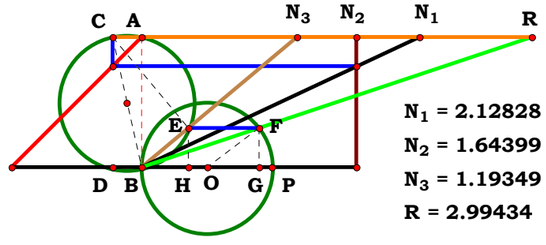


Unit. $AB := 1$ **Given.** $N_1 := 2.12828$ $N_2 := 1.64399$ $N_3 := 1.19349$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

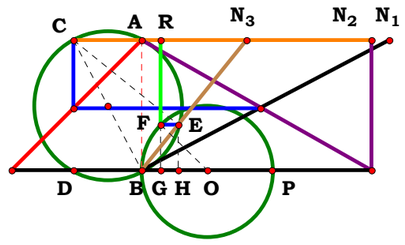
$$\frac{\sqrt{\left(B\cdot N_u^{\,2}-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot N_u^{\,2}+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}+B\cdot\left(C^2+N_u^{\,2}\right)}{2\cdot C\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)}=2.994357$$

$$Num := \frac{\sqrt{\left(B\cdot N_u^{\,2}-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot N_u^{\,2}+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}+B\cdot\left(C^2+N_u^{\,2}\right)}{\sqrt{\left[\sqrt{\left(B\cdot N_u^{\,2}-B\cdot C^2-2\cdot A\cdot C\cdot N_u+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot N_u^{\,2}+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}+B\cdot\left(C^2+N_u^{\,2}\right)\right]^2}}$$

$$Den := \frac{2\cdot C\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)}{\sqrt{\left[2\cdot C\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{-\left(B\cdot C^2-B\cdot N_u^{\,2}+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot N_u^{\,2}+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}+B\cdot\left(C^2+N_u^{\,2}\right)\right]\cdot\sqrt{C^2\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)^2}}{C\cdot\sqrt{\left[\sqrt{-\left(B\cdot C^2-B\cdot N_u^{\,2}+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot B\cdot C^2+B\cdot N_u^{\,2}+2\cdot A\cdot C\cdot N_u-2\cdot B\cdot C\cdot N_u\right)}+B\cdot\left(C^2+N_u^{\,2}\right)\right]^2}\cdot\left(B\cdot C+A\cdot N_u-B\cdot N_u\right)}=0$$



$N_1 = 1.89582$
$N_2 = 1.76022$
$N_3 = 0.80606$
$R = 0.14570$

Unit. $AB := 1$ **Given.** $N_1 := 1.89582$ $N_2 := 1.76022$ $N_3 := .80606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

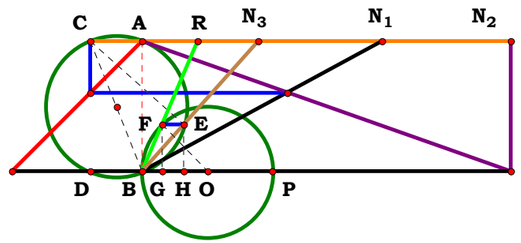
$$\frac{\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)}}{2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)} = 0.145693$$

$$Num := \frac{\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)}}{\sqrt{\left[\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)}\right]^2}}$$

$$Den := \frac{2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)}{\sqrt{\left[2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)}\right]\cdot\sqrt{\left(2\cdot C^2 + 2\cdot N_u^2\right)^2\cdot(A+B)^2}}{\left(2\cdot C^2 + 2\cdot N_u^2\right)\cdot(A+B)\cdot\sqrt{\left[\sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)} - \left(C^2 + N_u^2\right)\cdot(A+B)\right]^2}} = 0$$



$N_1 = 1.83771$
$N_2 = 2.82566$
$N_3 = 0.89323$
$R = 0.42577$

Unit. $AB := 1$ Given. $N_1 := 1.83771$ $N_2 := 2.82566$ $N_3 := .89323$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)}}{2\cdot C\cdot\left(A\cdot C + B\cdot C - B\cdot N_u\right)} = 0.425767$$

$$Num := \frac{\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)}}{\sqrt{\left[\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)}\right]^2}}$$

$$Den := \frac{2\cdot C\cdot\left(A\cdot C + B\cdot C - B\cdot N_u\right)}{\sqrt{\left[2\cdot C\cdot\left(A\cdot C + B\cdot C - B\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)}\right]\cdot\sqrt{C^2\cdot\left(A\cdot C + B\cdot C - B\cdot N_u\right)^2}}{C\cdot\sqrt{\left[\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)}\right]^2}\cdot\left(A\cdot C + B\cdot C - B\cdot N_u\right)} = 0$$

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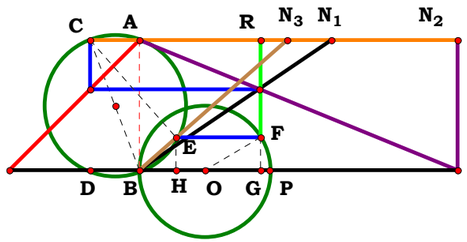


$N_1 = 1.46965$
$N_2 = 2.43822$
$N_3 = 1.13537$
$R = 0.93282$

Unit. $AB := 1$ **Given.** $N_1 := 1.46965$ $N_2 := 2.43822$ $N_3 := 1.13537$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)} + \left(C^2 + N_u^2\right)\cdot(A+B)}{2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)} = 0.932823$$

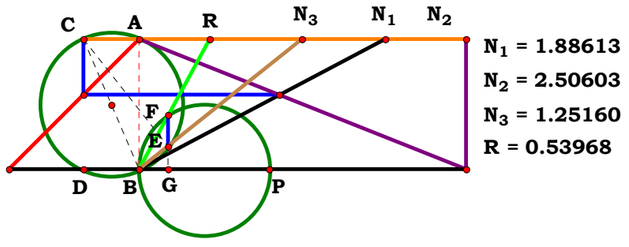
$$Num := \frac{\sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)} + \left(C^2 + N_u^2\right)\cdot(A+B)}{\sqrt{\left[\sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)} + \left(C^2 + N_u^2\right)\cdot(A+B)\right]^2}}$$

$$Den := \frac{2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)}{\sqrt{\left[2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)} + \left(C^2 + N_u^2\right)\cdot(A+B)\right]\cdot\sqrt{\left(2\cdot C^2 + 2\cdot N_u^2\right)^2\cdot(A+B)^2}}{\left(2\cdot C^2 + 2\cdot N_u^2\right)\cdot(A+B)\cdot\sqrt{\left[\sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot B\cdot C\cdot N_u\right)} + \left(C^2 + N_u^2\right)\cdot(A+B)\right]^2}} = 0$$

4RST10BB3R3



Unit. $AB := 1$ **Given.** $N_1 := 1.88613$ $N_2 := 2.50603$ $N_3 := 1.25160$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u)}{\sqrt{N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u) \cdot (A \cdot C^2 + B \cdot C^2 + A \cdot N_u^2 + 2 \cdot B \cdot N_u^2 - A \cdot C \cdot N_u - B \cdot C \cdot N_u)}} = 0.539678$$

$$Num := \frac{N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u)}{\sqrt{[N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u)]^2}}$$

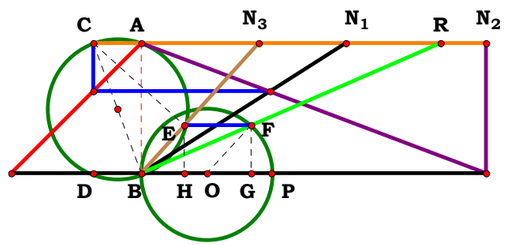
$$Den := \frac{\sqrt{N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u) \cdot (A \cdot C^2 + B \cdot C^2 + A \cdot N_u^2 + 2 \cdot B \cdot N_u^2 - A \cdot C \cdot N_u - B \cdot C \cdot N_u)}}{\sqrt{\left[\sqrt{N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u) \cdot (A \cdot C^2 + B \cdot C^2 + A \cdot N_u^2 + 2 \cdot B \cdot N_u^2 - A \cdot C \cdot N_u - B \cdot C \cdot N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot (A \cdot C + B \cdot C - B \cdot N_u)}{\sqrt{N_u^2 \cdot (A \cdot C + B \cdot C - B \cdot N_u)^2}} = 0$$

4RST10BB3R4



$N_1 = 1.56650$
$N_2 = 2.64163$
$N_3 = 0.90291$
$R = 2.29939$

Unit. $AB := 1$ Given. $N_1 := 1.56650$ $N_2 := 2.64163$ $N_3 := .90291$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

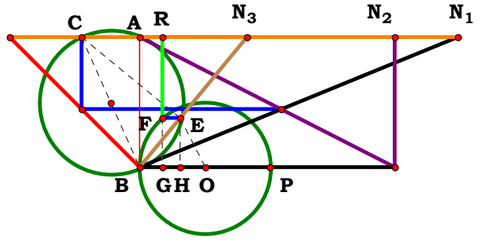
$$\frac{\sqrt{\left(A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+B\cdot N_u^{\,2}+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^{\,2}+B\cdot N_u^{\,2}-2\cdot B\cdot C\cdot N_u\right)}+\left(C^2+N_u^{\,2}\right)\cdot(A+B)}{2\cdot C\cdot\left(A\cdot C+B\cdot C-B\cdot N_u\right)}=2.29937$$

$$Num := \frac{\sqrt{\left(A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+B\cdot N_u^{\,2}+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^{\,2}+B\cdot N_u^{\,2}-2\cdot B\cdot C\cdot N_u\right)}+\left(C^2+N_u^{\,2}\right)\cdot(A+B)}{\sqrt{\left[\sqrt{\left(A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+B\cdot N_u^{\,2}+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^{\,2}+B\cdot N_u^{\,2}-2\cdot B\cdot C\cdot N_u\right)}+\left(C^2+N_u^{\,2}\right)\cdot(A+B)\right]^2}}$$

$$Den := \frac{2\cdot C\cdot\left(A\cdot C+B\cdot C-B\cdot N_u\right)}{\sqrt{\left[2\cdot C\cdot\left(A\cdot C+B\cdot C-B\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{\left(A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+B\cdot N_u^{\,2}+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^{\,2}+B\cdot N_u^{\,2}-2\cdot B\cdot C\cdot N_u\right)}+\left(C^2+N_u^{\,2}\right)\cdot(A+B)\right]\cdot\sqrt{C^2\cdot\left(A\cdot C+B\cdot C-B\cdot N_u\right)^2}}{C\cdot\sqrt{\left[\sqrt{\left(A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+B\cdot N_u^{\,2}+2\cdot B\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^{\,2}+B\cdot N_u^{\,2}-2\cdot B\cdot C\cdot N_u\right)}+\left(C^2+N_u^{\,2}\right)\cdot(A+B)\right]^2}\cdot\left(A\cdot C+B\cdot C-B\cdot N_u\right)}=0$$



$N_1 = 2.43822$
$N_2 = 1.95394$
$N_3 = 0.82543$
$R = 0.17083$

Unit. $AB := 1$ **Given.** $N_1 := 2.43822$ $N_2 := 1.95394$ $N_3 := .82543$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot A\cdot C\cdot N_u\right)}}{2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)} = 0.170832$$

$$Num := \frac{\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot A\cdot C\cdot N_u\right)}}{\sqrt{\left[\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot A\cdot C\cdot N_u\right)}\right]^2}}$$

$$Den := \frac{2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)}{\sqrt{\left[2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot A\cdot C\cdot N_u\right)}\right]\cdot\sqrt{\left(2\cdot C^2 + 2\cdot N_u^2\right)^2\cdot(A+B)^2}}{\left(2\cdot C^2 + 2\cdot N_u^2\right)\cdot(A+B)\cdot\sqrt{\left[\left(C^2 + N_u^2\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot A\cdot C\cdot N_u\right)}\right]^2}} = 0$$

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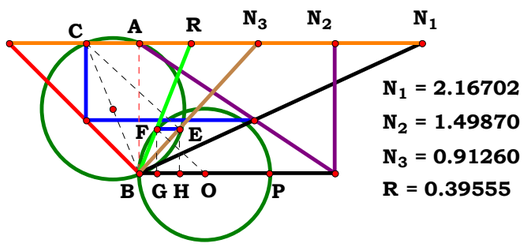

Unit. $AB := 1$ **Given.** $N_1 := 2.16702$ $N_2 := 1.49870$ $N_3 := .91260$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\left(C^2 + N_u^{\,2}\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^{\,2} - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^{\,2} + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^{\,2} + B\cdot N_u^{\,2} - 2\cdot A\cdot C\cdot N_u\right)}}{2\cdot C\cdot\left(A\cdot C + B\cdot C - A\cdot N_u\right)} = 0.395546$$

$$Num := \frac{\left(C^2 + N_u^{\,2}\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^{\,2} - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^{\,2} + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^{\,2} + B\cdot N_u^{\,2} - 2\cdot A\cdot C\cdot N_u\right)}}{\sqrt{\left[\left(C^2 + N_u^{\,2}\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^{\,2} - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^{\,2} + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^{\,2} + B\cdot N_u^{\,2} - 2\cdot A\cdot C\cdot N_u\right)}\right]^2}}$$

$$Den := \frac{2\cdot C\cdot\left(A\cdot C + B\cdot C - A\cdot N_u\right)}{\sqrt{\left[2\cdot C\cdot\left(A\cdot C + B\cdot C - A\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\left(C^2 + N_u^{\,2}\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^{\,2} - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^{\,2} + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^{\,2} + B\cdot N_u^{\,2} - 2\cdot A\cdot C\cdot N_u\right)}\right]\cdot\sqrt{C^2\cdot\left(A\cdot C + B\cdot C - A\cdot N_u\right)^2}}{C\cdot\sqrt{\left[\left(C^2 + N_u^{\,2}\right)\cdot(A+B) - \sqrt{\left(A\cdot N_u^{\,2} - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^{\,2} + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^{\,2} + B\cdot N_u^{\,2} - 2\cdot A\cdot C\cdot N_u\right)}\right]^2}\cdot\left(A\cdot C + B\cdot C - A\cdot N_u\right)} = 0$$

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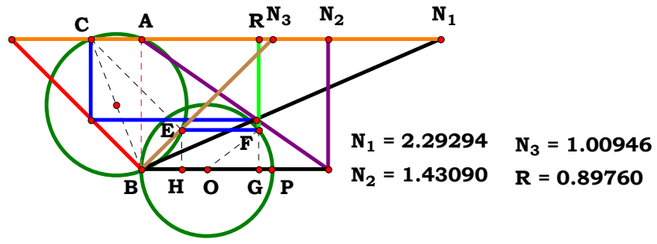


Unit. $AB := 1$ **Given.** $N_1 := 2.29294$ $N_2 := 1.43090$ $N_3 := 1.00946$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

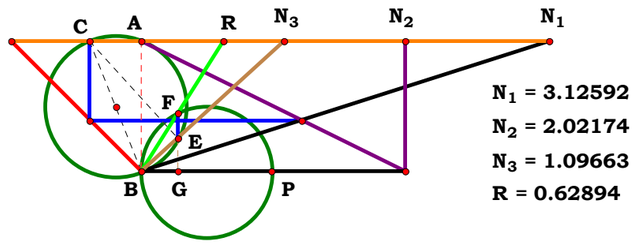
$$\frac{\sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot A\cdot C\cdot N_u\right)} + \left(C^2 + N_u^2\right)\cdot(A+B)}{2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)} = 0.8976$$

$$Num := \frac{\sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot A\cdot C\cdot N_u\right)} + \left(C^2 + N_u^2\right)\cdot(A+B)}{\sqrt{\left[\sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot A\cdot C\cdot N_u\right)} + \left(C^2 + N_u^2\right)\cdot(A+B)\right]^2}}$$

$$Den := \frac{2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)}{\sqrt{\left[2\cdot\left(C^2 + N_u^2\right)\cdot(A+B)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot A\cdot C\cdot N_u\right)} + \left(C^2 + N_u^2\right)\cdot(A+B)\right]\cdot\sqrt{\left(2\cdot C^2 + 2\cdot N_u^2\right)^2\cdot(A+B)^2}}{\left(2\cdot C^2 + 2\cdot N_u^2\right)\cdot(A+B)\cdot\sqrt{\left[\sqrt{\left(A\cdot N_u^2 - B\cdot C^2 - A\cdot C^2 + B\cdot N_u^2 + 2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2 + 3\cdot B\cdot C^2 + A\cdot N_u^2 + B\cdot N_u^2 - 2\cdot A\cdot C\cdot N_u\right)} + \left(C^2 + N_u^2\right)\cdot(A+B)\right]^2}} = 0$$



Unit. $AB := 1$ **Given.** $N_1 := 3.12592$ $N_2 := 2.02174$ $N_3 := 1.09663$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u)}{\sqrt{N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u) \cdot (A \cdot C^2 + B \cdot C^2 + 2 \cdot A \cdot N_u^2 + B \cdot N_u^2 - A \cdot C \cdot N_u - B \cdot C \cdot N_u)}} = 0.628937$$

$$Num := \frac{N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u)}{\sqrt{[N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u)]^2}}$$

$$Den := \frac{\sqrt{N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u) \cdot (A \cdot C^2 + B \cdot C^2 + 2 \cdot A \cdot N_u^2 + B \cdot N_u^2 - A \cdot C \cdot N_u - B \cdot C \cdot N_u)}}{\sqrt{\left[\sqrt{N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u) \cdot (A \cdot C^2 + B \cdot C^2 + 2 \cdot A \cdot N_u^2 + B \cdot N_u^2 - A \cdot C \cdot N_u - B \cdot C \cdot N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot (A \cdot C + B \cdot C - A \cdot N_u)}{\sqrt{N_u^2 \cdot (A \cdot C + B \cdot C - A \cdot N_u)^2}} = 0$$

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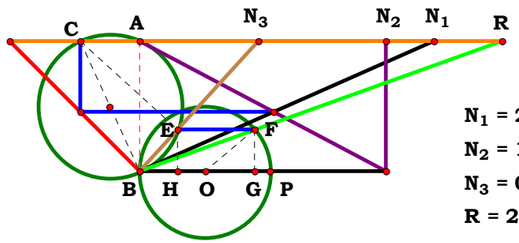


$N_1 = 2.25419$
$N_2 = 1.88613$
$N_3 = 0.91260$
$R = 2.77689$

Unit. $AB := 1$ **Given.** $N_1 := 2.25419$ $N_2 := 1.88613$ $N_3 := .91260$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

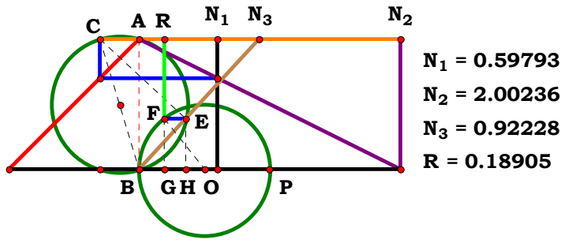
$$\frac{\sqrt{\left(A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+B\cdot N_u^{\,2}+2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^{\,2}+B\cdot N_u^{\,2}-2\cdot A\cdot C\cdot N_u\right)}+\left(C^2+N_u^{\,2}\right)\cdot(A+B)}{2\cdot C\cdot\left(A\cdot C+B\cdot C-A\cdot N_u\right)}=2.776892$$

$$Num := \frac{\sqrt{\left(A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+B\cdot N_u^{\,2}+2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^{\,2}+B\cdot N_u^{\,2}-2\cdot A\cdot C\cdot N_u\right)}+\left(C^2+N_u^{\,2}\right)\cdot(A+B)}{\sqrt{\left[\sqrt{\left(A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+B\cdot N_u^{\,2}+2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^{\,2}+B\cdot N_u^{\,2}-2\cdot A\cdot C\cdot N_u\right)}+\left(C^2+N_u^{\,2}\right)\cdot(A+B)\right]^2}}$$

$$Den := \frac{2\cdot C\cdot\left(A\cdot C+B\cdot C-A\cdot N_u\right)}{\sqrt{\left[2\cdot C\cdot\left(A\cdot C+B\cdot C-A\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{\left(A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+B\cdot N_u^{\,2}+2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^{\,2}+B\cdot N_u^{\,2}-2\cdot A\cdot C\cdot N_u\right)}+\left(C^2+N_u^{\,2}\right)\cdot(A+B)\right]\cdot\sqrt{C^2\cdot\left(A\cdot C+B\cdot C-A\cdot N_u\right)^2}}{C\cdot\sqrt{\left[\sqrt{\left(A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+B\cdot N_u^{\,2}+2\cdot A\cdot C\cdot N_u\right)\cdot\left(3\cdot A\cdot C^2+3\cdot B\cdot C^2+A\cdot N_u^{\,2}+B\cdot N_u^{\,2}-2\cdot A\cdot C\cdot N_u\right)}+\left(C^2+N_u^{\,2}\right)\cdot(A+B)\right]^2}\cdot\left(A\cdot C+B\cdot C-A\cdot N_u\right)}=0$$



Unit. $AB := 1$ **Given.** $N_1 := .59793$ $N_2 := 2.00236$ $N_3 := .92228$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(2\cdot B\cdot C\cdot N_u-3\cdot A\cdot C^2-A\cdot N_u{}^2\right)\cdot\left(A\cdot C^2-2\cdot B\cdot C\cdot N_u-A\cdot N_u{}^2\right)}}{2\cdot\left(C^2+N_u{}^2\right)\cdot A}=0.189047$$

$$Num := \frac{A\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(2\cdot B\cdot C\cdot N_u-3\cdot A\cdot C^2-A\cdot N_u{}^2\right)\cdot\left(A\cdot C^2-2\cdot B\cdot C\cdot N_u-A\cdot N_u{}^2\right)}}{\sqrt{\left[A\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(2\cdot B\cdot C\cdot N_u-3\cdot A\cdot C^2-A\cdot N_u{}^2\right)\cdot\left(A\cdot C^2-2\cdot B\cdot C\cdot N_u-A\cdot N_u{}^2\right)}\right]^2}}$$

$$Den := \frac{2\cdot\left(C^2+N_u{}^2\right)\cdot A}{\sqrt{\left[2\cdot\left(C^2+N_u{}^2\right)\cdot A\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[A\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(-A\cdot C^2+2\cdot B\cdot C\cdot N_u+A\cdot N_u{}^2\right)\cdot\left(3\cdot A\cdot C^2-2\cdot B\cdot C\cdot N_u+A\cdot N_u{}^2\right)}\right]\cdot\sqrt{A^2\cdot\left(2\cdot C^2+2\cdot N_u{}^2\right)^2}}{A\cdot\left(2\cdot C^2+2\cdot N_u{}^2\right)\cdot\sqrt{\left[A\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(-A\cdot C^2+2\cdot B\cdot C\cdot N_u+A\cdot N_u{}^2\right)\cdot\left(3\cdot A\cdot C^2-2\cdot B\cdot C\cdot N_u+A\cdot N_u{}^2\right)}\right]^2}}=0$$

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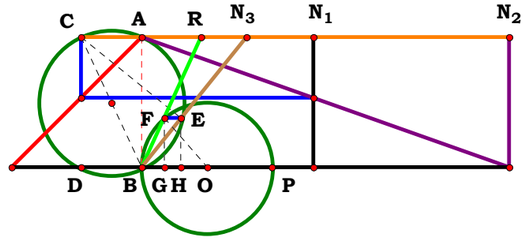

$N_1 = 1.31467$

$N_2 = 2.81597$

$N_3 = 0.80606$

$R = 0.45701$

Unit. $AB := 1$ **Given.** $N_1 := 1.31467$ $N_2 := 2.81597$ $N_3 := .80606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{A\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(2\cdot B\cdot C\cdot N_u-3\cdot A\cdot C^2-A\cdot N_u{}^2\right)\cdot\left(A\cdot C^2-2\cdot B\cdot C\cdot N_u-A\cdot N_u{}^2\right)}}{2\cdot C\cdot\left(A\cdot C-B\cdot N_u\right)}=0.457008$$

$$Num := \frac{A\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(2\cdot B\cdot C\cdot N_u-3\cdot A\cdot C^2-A\cdot N_u{}^2\right)\cdot\left(A\cdot C^2-2\cdot B\cdot C\cdot N_u-A\cdot N_u{}^2\right)}}{\sqrt{\left[A\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(2\cdot B\cdot C\cdot N_u-3\cdot A\cdot C^2-A\cdot N_u{}^2\right)\cdot\left(A\cdot C^2-2\cdot B\cdot C\cdot N_u-A\cdot N_u{}^2\right)}\right]^2}}$$

$$Den := \frac{2\cdot C\cdot\left(A\cdot C-B\cdot N_u\right)}{\sqrt{\left[2\cdot C\cdot\left(A\cdot C-B\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[A\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(-A\cdot C^2+2\cdot B\cdot C\cdot N_u+A\cdot N_u{}^2\right)\cdot\left(3\cdot A\cdot C^2-2\cdot B\cdot C\cdot N_u+A\cdot N_u{}^2\right)}\right]\cdot\sqrt{C^2\cdot\left(A\cdot C-B\cdot N_u\right)^2}}{C\cdot\sqrt{\left[A\cdot\left(C^2+N_u{}^2\right)-\sqrt{\left(-A\cdot C^2+2\cdot B\cdot C\cdot N_u+A\cdot N_u{}^2\right)\cdot\left(3\cdot A\cdot C^2-2\cdot B\cdot C\cdot N_u+A\cdot N_u{}^2\right)}\right]^2}\cdot\left(A\cdot C-B\cdot N_u\right)}=0$$

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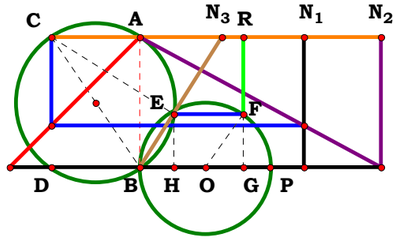


$N_1 = 1.25656$
$N_2 = 1.84739$
$N_3 = 0.63171$
$R = 0.78952$

Unit. $AB := 1$ **Given.** $N_1 := 1.25656$ $N_2 := 1.84739$ $N_3 := .63171$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{\left(2\cdot B\cdot C\cdot N_u - A\cdot C^2 + A\cdot N_u^{\,2}\right)\cdot\left(3\cdot A\cdot C^2 - 2\cdot B\cdot C\cdot N_u + A\cdot N_u^{\,2}\right)} + A\cdot\left(C^2 + N_u^{\,2}\right)}{2\cdot\left(C^2 + N_u^{\,2}\right)\cdot A} = 0.789522$$

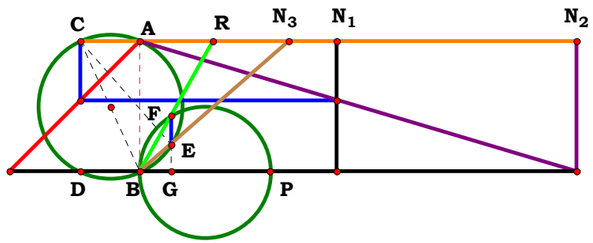
$$Num := \frac{\sqrt{\left(2\cdot B\cdot C\cdot N_u - A\cdot C^2 + A\cdot N_u^{\,2}\right)\cdot\left(3\cdot A\cdot C^2 - 2\cdot B\cdot C\cdot N_u + A\cdot N_u^{\,2}\right)} + A\cdot\left(C^2 + N_u^{\,2}\right)}{\sqrt{\left[\sqrt{\left(2\cdot B\cdot C\cdot N_u - A\cdot C^2 + A\cdot N_u^{\,2}\right)\cdot\left(3\cdot A\cdot C^2 - 2\cdot B\cdot C\cdot N_u + A\cdot N_u^{\,2}\right)} + A\cdot\left(C^2 + N_u^{\,2}\right)\right]^2}}$$

$$Den := \frac{2\cdot\left(C^2 + N_u^{\,2}\right)\cdot A}{\sqrt{\left[2\cdot\left(C^2 + N_u^{\,2}\right)\cdot A\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[A\cdot\left(C^2 + N_u^{\,2}\right) + \sqrt{\left(2\cdot B\cdot C\cdot N_u - A\cdot C^2 + A\cdot N_u^{\,2}\right)\cdot\left(3\cdot A\cdot C^2 - 2\cdot B\cdot C\cdot N_u + A\cdot N_u^{\,2}\right)}\right]\cdot\sqrt{A^2\cdot\left(2\cdot C^2 + 2\cdot N_u^{\,2}\right)^2}}{A\cdot\sqrt{\left[A\cdot\left(C^2 + N_u^{\,2}\right) + \sqrt{\left(2\cdot B\cdot C\cdot N_u - A\cdot C^2 + A\cdot N_u^{\,2}\right)\cdot\left(3\cdot A\cdot C^2 - 2\cdot B\cdot C\cdot N_u + A\cdot N_u^{\,2}\right)}\right]^2}\cdot\left(2\cdot C^2 + 2\cdot N_u^{\,2}\right)} = 0$$

4RST10BB5R3



$N_1 = 1.50839$
$N_2 = 3.34869$
$N_3 = 1.14506$
$R = 0.56180$

Unit. $AB := 1$ Given. $N_1 := 1.50839$ $N_2 := 3.34869$ $N_3 := 1.14506$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{N_u \cdot (A \cdot C - B \cdot N_u)}{\sqrt{N_u \cdot (A \cdot C - B \cdot N_u) \cdot (A \cdot C^2 + A \cdot N_u^2 + B \cdot N_u^2 - A \cdot C \cdot N_u)}} = 0.561804$$

$$Num := \frac{N_u \cdot (A \cdot C - B \cdot N_u)}{\sqrt{[N_u \cdot (A \cdot C - B \cdot N_u)]^2}}$$

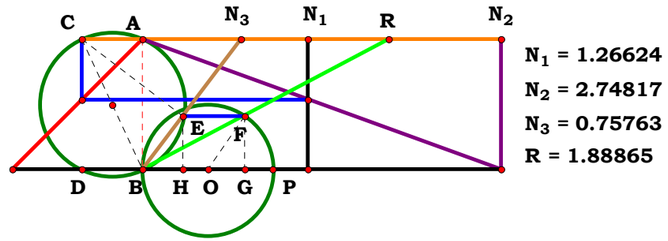
$$Den := \frac{\sqrt{N_u \cdot (A \cdot C - B \cdot N_u) \cdot (A \cdot C^2 + A \cdot N_u^2 + B \cdot N_u^2 - A \cdot C \cdot N_u)}}{\sqrt{\left[\sqrt{N_u \cdot (A \cdot C - B \cdot N_u) \cdot (A \cdot C^2 + A \cdot N_u^2 + B \cdot N_u^2 - A \cdot C \cdot N_u)}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{N_u \cdot (A \cdot C - B \cdot N_u)}{\sqrt{N_u^2 \cdot (A \cdot C - B \cdot N_u)^2}} = 0$$

4RST10BB5R4



Unit. $AB := 1$ **Given.** $N_1 := 1.26624$ $N_2 := 2.74817$ $N_3 := .75763$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{\left(2\cdot B\cdot C\cdot N_u - A\cdot C^2 + A\cdot N_u^2\right)\cdot\left(3\cdot A\cdot C^2 - 2\cdot B\cdot C\cdot N_u + A\cdot N_u^2\right)} + A\cdot\left(C^2 + N_u^2\right)}{2\cdot C\cdot\left(A\cdot C - B\cdot N_u\right)} = 1.888658$$

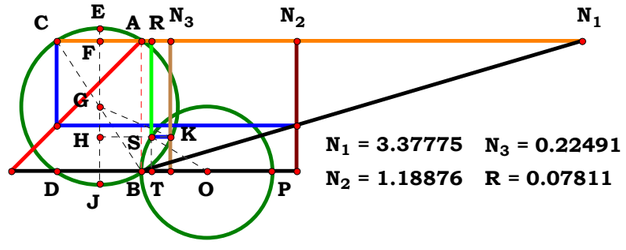
$$Num := \frac{\sqrt{\left(2\cdot B\cdot C\cdot N_u - A\cdot C^2 + A\cdot N_u^2\right)\cdot\left(3\cdot A\cdot C^2 - 2\cdot B\cdot C\cdot N_u + A\cdot N_u^2\right)} + A\cdot\left(C^2 + N_u^2\right)}{\sqrt{\left[\sqrt{\left(2\cdot B\cdot C\cdot N_u - A\cdot C^2 + A\cdot N_u^2\right)\cdot\left(3\cdot A\cdot C^2 - 2\cdot B\cdot C\cdot N_u + A\cdot N_u^2\right)} + A\cdot\left(C^2 + N_u^2\right)\right]^2}}$$

$$Den := \frac{2\cdot C\cdot\left(A\cdot C - B\cdot N_u\right)}{\sqrt{\left[2\cdot C\cdot\left(A\cdot C - B\cdot N_u\right)\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\sqrt{C^2\cdot\left(A\cdot C - B\cdot N_u\right)^2}\cdot\left[A\cdot\left(C^2 + N_u^2\right) + \sqrt{\left(2\cdot B\cdot C\cdot N_u - A\cdot C^2 + A\cdot N_u^2\right)\cdot\left(3\cdot A\cdot C^2 - 2\cdot B\cdot C\cdot N_u + A\cdot N_u^2\right)}\right]}{C\cdot\sqrt{\left[A\cdot\left(C^2 + N_u^2\right) + \sqrt{\left(2\cdot B\cdot C\cdot N_u - A\cdot C^2 + A\cdot N_u^2\right)\cdot\left(3\cdot A\cdot C^2 - 2\cdot B\cdot C\cdot N_u + A\cdot N_u^2\right)}\right]^2}\cdot\left(A\cdot C - B\cdot N_u\right)} = 0$$

4RST10CB1R0



Unit. $AB := 1$ **Given.** $N_1 := 3.37775$ $N_2 := 1.18876$ $N_3 := .22491$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{A}\cdot\sqrt{\sqrt{N_u}\cdot\left[2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u^{\,2}+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}-\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left[B\cdot\left(C^2-4\cdot N_u^{\,2}\right)+4\cdot C\cdot N_u\cdot(A-B)\right]\right]}}{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C}=0.078116$$

$$Num := C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{A}\cdot\sqrt{\sqrt{N_u}\cdot\left[2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u^{\,2}+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}-\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left[B\cdot\left(C^2-4\cdot N_u^{\,2}\right)+4\cdot C\cdot N_u\cdot(A-B)\right]\right]}$$

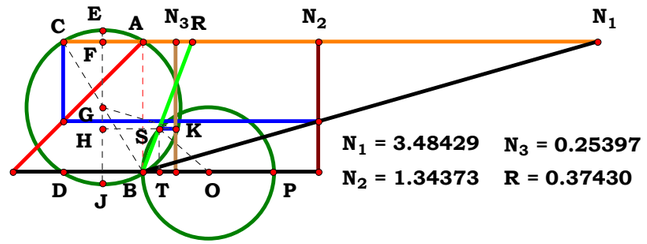
$$Den := 2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C$$

$L := \frac{Num}{Den}$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{A}\cdot\sqrt{\sqrt{N_u}\cdot\left[2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u^{\,2}+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}-\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left[B\cdot\left(C^2-4\cdot N_u^{\,2}\right)+4\cdot C\cdot N_u\cdot(A-B)\right]\right]}\right]\cdot\sqrt{C^2\cdot N_u\cdot(A\cdot B)^{\frac{3}{2}}}}{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot\sqrt{\left[C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{A}\cdot\sqrt{\sqrt{N_u}\cdot\left[2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u^{\,2}+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}-\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left[B\cdot\left(C^2-4\cdot N_u^{\,2}\right)+4\cdot C\cdot N_u\cdot(A-B)\right]\right]}\right]^2}}=0$$

4RST10CB1R1



Unit. $AB := 1$ **Given.** $N_1 := 3.48429$ $N_2 := 1.34373$ $N_3 := .25397$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{A}\cdot\sqrt{-\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]}}{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{A}\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]}=0.374325$$

$$\mathrm{Num} := \frac{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{A}\cdot\sqrt{-\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]}}{\sqrt{\left[C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{A}\cdot\sqrt{-\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]}\right]^2}}$$

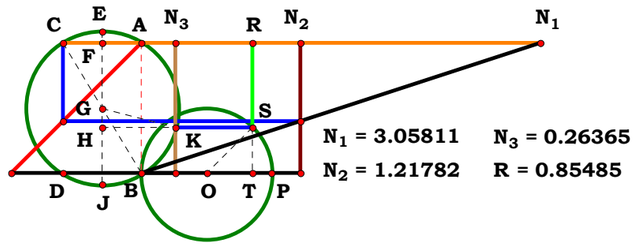
$$\mathrm{Den} := \frac{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{A}\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]}{\sqrt{\left[(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{A}\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]\right]^2}}$$

$L := \frac{\mathrm{Num}}{\mathrm{Den}}$

$\mathrm{Num} = 1$ $\mathrm{Den} = 1$ $L = 1$

$$L-\frac{\left[\sqrt{A}\cdot\sqrt{-\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)\ \ldots\right.\right.}\left.\left.+\ -2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]-C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]\cdot\sqrt{\left[\sqrt{A}\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2\ \ldots\right.}\right.}\left.\left.+\ 4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\right]^2\cdot\sqrt{A\cdot B}}{\left[\sqrt{A}\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2\ \ldots\right.}\left.+\ 4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\right]\cdot(A\cdot B)^{\frac{1}{4}}\cdot\sqrt{\left[\sqrt{A}\cdot\sqrt{-\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)\ \ldots\right.\right.}\left.\left.+\ -2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]-C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}=0$$

4RST10CB1R2



Unit. $AB := 1$ Given. $N_1 := 3.05811$ $N_2 := 1.21782$ $N_3 := .26365$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A}\cdot\sqrt{-\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C}=0.854855$$

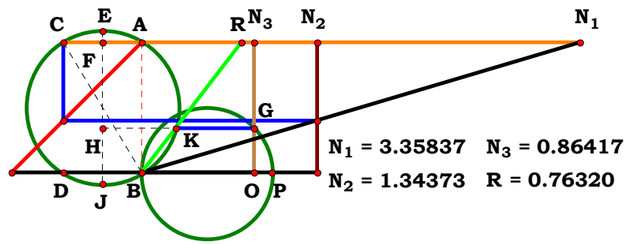
$$Num := \frac{\sqrt{A}\cdot\sqrt{-\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{\sqrt{\left[\sqrt{A}\cdot\sqrt{-\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}}$$

$$Den := \frac{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C}{\sqrt{\left[2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{A}\cdot\sqrt{-\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]\cdot\sqrt{C^2\cdot N_u\cdot(A\cdot B)^{\frac{3}{2}}}}{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot\sqrt{\left[\sqrt{A}\cdot\sqrt{-\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}}=0$$

4RST10CB1R3



Unit. $AB := 1$ **Given.** $N_1 := 3.35837$ $N_2 := 1.34373$ $N_3 := .86417$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot(A-B)+\sqrt{A^2\cdot C^2+B^2\cdot C^2+4\cdot B^2\cdot N_u{}^2-2\cdot A\cdot B\cdot C^2-4\cdot B^2\cdot C\cdot N_u+4\cdot B^2\cdot C\cdot\sqrt{N_u\cdot(C-N_u)}}}{2\cdot B\cdot\sqrt{N_u\cdot(C-N_u)}} = 0.763199$$

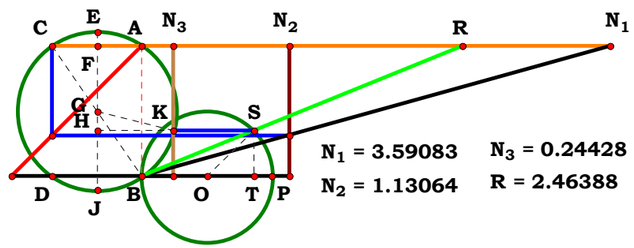
$$Num := \frac{C\cdot(A-B)+\sqrt{A^2\cdot C^2+B^2\cdot C^2+4\cdot B^2\cdot N_u{}^2-2\cdot A\cdot B\cdot C^2-4\cdot B^2\cdot C\cdot N_u+4\cdot B^2\cdot C\cdot\sqrt{N_u\cdot(C-N_u)}}}{\sqrt{\left[C\cdot(A-B)+\sqrt{A^2\cdot C^2+B^2\cdot C^2+4\cdot B^2\cdot N_u{}^2-2\cdot A\cdot B\cdot C^2-4\cdot B^2\cdot C\cdot N_u+4\cdot B^2\cdot C\cdot\sqrt{N_u\cdot(C-N_u)}}\right]^2}}$$

$$Den := \frac{2\cdot B\cdot\sqrt{N_u\cdot(C-N_u)}}{\sqrt{\left[2\cdot B\cdot\sqrt{N_u\cdot(C-N_u)}\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{A^2\cdot C^2+B^2\cdot C^2+4\cdot B^2\cdot N_u{}^2-2\cdot A\cdot B\cdot C^2-4\cdot B^2\cdot C\cdot N_u+4\cdot B^2\cdot C\cdot\sqrt{N_u\cdot(C-N_u)}}+C\cdot(A-B)\right]\cdot\sqrt{B^2\cdot N_u\cdot(C-N_u)}}{B\cdot\sqrt{\left[\sqrt{A^2\cdot C^2+B^2\cdot C^2+4\cdot B^2\cdot N_u{}^2-2\cdot A\cdot B\cdot C^2-4\cdot B^2\cdot C\cdot N_u+4\cdot B^2\cdot C\cdot\sqrt{N_u\cdot(C-N_u)}}+C\cdot(A-B)\right]^2}\cdot\sqrt{N_u\cdot(C-N_u)}} = 0$$

4RST10CB1R4



Unit. $AB := 1$ **Given.** $N_1 := 3.59083$ $N_2 := 1.13064$ $N_3 := .24428$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A}\cdot\sqrt{-\sqrt{N_u}}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{A}\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]}=2.46388$$

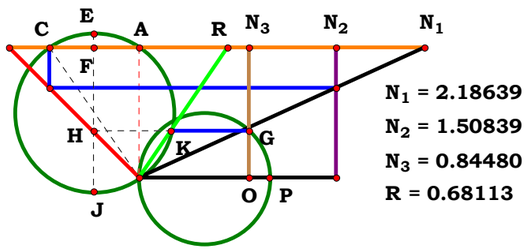
$$\text{Num} := \frac{\sqrt{A}\cdot\sqrt{-\sqrt{N_u}}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{\sqrt{\left[\sqrt{A}\cdot\sqrt{-\sqrt{N_u}}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)-2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}}$$

$$\text{Den} := \frac{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{A}\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]}{\sqrt{\left[(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{A}\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\right]\right]^2}} \qquad L := \frac{\text{Num}}{\text{Den}}$$

$\text{Num} = 1$ $\text{Den} = 1$ $L = 1$

$$L-\frac{\left[\sqrt{A}\cdot\sqrt{-\sqrt{N_u}}\cdot\left[\begin{matrix}\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)\ \ldots\\ +\ -2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\end{matrix}\right]+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]\cdot\sqrt{\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{A}\cdot\sqrt{N_u\cdot\left(\begin{matrix}B\cdot C^2-4\cdot B\cdot N_u{}^2\ \ldots\\ +\ 4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\end{matrix}\right)}\right]^2\cdot\sqrt{A\cdot B}}}{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{A}\cdot\sqrt{N_u\cdot\left(\begin{matrix}B\cdot C^2-4\cdot B\cdot N_u{}^2\ \ldots\\ +\ 4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\end{matrix}\right)}\right]\cdot\sqrt{\left[\sqrt{A}\cdot\sqrt{-\sqrt{N_u}}\cdot\left[\begin{matrix}\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)\ \ldots\\ +\ -2\cdot\sqrt{A}\cdot B\cdot C\cdot\sqrt{N_u\cdot\left(B\cdot C^2-4\cdot B\cdot N_u{}^2+4\cdot A\cdot C\cdot N_u-4\cdot B\cdot C\cdot N_u\right)}\end{matrix}\right]+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}}=0$$

4RST10CB2R3



Unit. $AB := 1$ **Given.** $N_1 := 2.18639$ $N_2 := 1.50839$ $N_3 := .84480$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot {N_u}^2 - 4 \cdot B^2 \cdot C \cdot N_u + 4 \cdot B^2 \cdot C \cdot \sqrt{N_u \cdot (C - N_u)}} - A \cdot C}{2 \cdot B \cdot \sqrt{N_u \cdot (C - N_u)}} = 0.681133$$

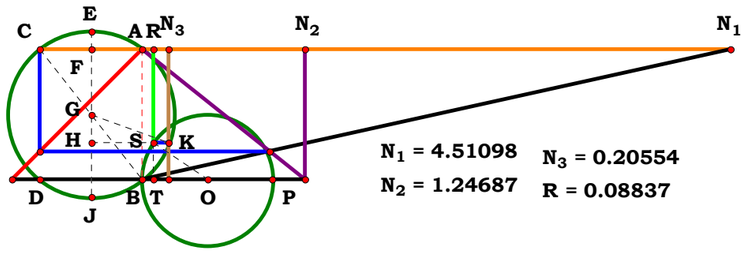
$$Num := \frac{\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot {N_u}^2 - 4 \cdot B^2 \cdot C \cdot N_u + 4 \cdot B^2 \cdot C \cdot \sqrt{N_u \cdot (C - N_u)}} - A \cdot C}{\sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot {N_u}^2 - 4 \cdot B^2 \cdot C \cdot N_u + 4 \cdot B^2 \cdot C \cdot \sqrt{N_u \cdot (C - N_u)}} - A \cdot C\right]^2}}$$

$$Den := \frac{2 \cdot B \cdot \sqrt{N_u \cdot (C - N_u)}}{\sqrt{\left[2 \cdot B \cdot \sqrt{N_u \cdot (C - N_u)}\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot {N_u}^2 - 4 \cdot B^2 \cdot C \cdot N_u + 4 \cdot B^2 \cdot C \cdot \sqrt{N_u \cdot (C - N_u)}} - A \cdot C\right] \cdot \sqrt{B^2 \cdot N_u \cdot (C - N_u)}}{B \cdot \sqrt{N_u \cdot (C - N_u)} \cdot \sqrt{\left[\sqrt{A^2 \cdot C^2 + 4 \cdot B^2 \cdot {N_u}^2 - 4 \cdot B^2 \cdot C \cdot N_u + 4 \cdot B^2 \cdot C \cdot \sqrt{N_u \cdot (C - N_u)}} - A \cdot C\right]^2}} = 0$$

4RST10CB3R0



Unit. $AB := 1$ Given. $N_1 := 4.51098$ $N_2 := 1.24687$ $N_3 := .20554$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot B\cdot C\cdot N_u\right)+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot B\cdot N_u^{\,2}-4\cdot B\cdot C\cdot N_u\right)}}}{2\cdot C\cdot\sqrt{N_u\cdot(A+B)}}=0.088378$$

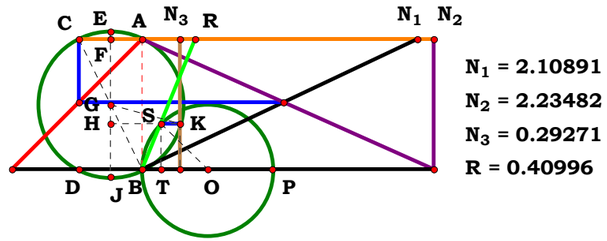
$$Num := \frac{C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot B\cdot C\cdot N_u\right)+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot B\cdot N_u^{\,2}-4\cdot B\cdot C\cdot N_u\right)}}}{\sqrt{\left[C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot B\cdot C\cdot N_u\right)+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot B\cdot N_u^{\,2}-4\cdot B\cdot C\cdot N_u\right)}}\right]^2}}$$

$$Den := \frac{2\cdot C\cdot\sqrt{N_u\cdot(A+B)}}{\sqrt{\left[2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot B\cdot C\cdot N_u\right)+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot B\cdot N_u^{\,2}-4\cdot B\cdot C\cdot N_u\right)}}\right]\cdot\sqrt{C^2\cdot N_u\cdot(A+B)}}{C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{\left[C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot B\cdot C\cdot N_u\right)+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot B\cdot N_u^{\,2}-4\cdot B\cdot C\cdot N_u\right)}}\right]^2}}=0$$

4RST10CB3R1



$N_1 = 2.10891$

$N_2 = 2.23482$

$N_3 = 0.29271$

$R = 0.40996$

Unit. $AB := 1$ Given. $N_1 := 2.10891$ $N_2 := 2.23482$ $N_3 := .29271$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{4\cdot A\cdot N_u{}^3+4\cdot B\cdot N_u{}^3+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u{}^2-4\cdot B\cdot N_u{}^2-4\cdot B\cdot C\cdot N_u\right)}-A\cdot C^2\cdot N_u-B\cdot C\cdot N_u\cdot\left(C-4\cdot N_u\right)}}{C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u{}^2-4\cdot B\cdot N_u{}^2-4\cdot B\cdot C\cdot N_u\right)}}=0.409965$$

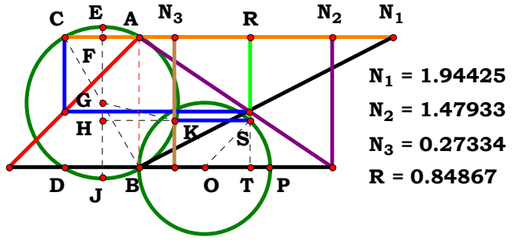
$$Num := \frac{C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{4\cdot A\cdot N_u{}^3+4\cdot B\cdot N_u{}^3+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u{}^2-4\cdot B\cdot N_u{}^2-4\cdot B\cdot C\cdot N_u\right)}-A\cdot C^2\cdot N_u-B\cdot C\cdot N_u\cdot\left(C-4\cdot N_u\right)}}{\sqrt{\left[C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{4\cdot A\cdot N_u{}^3+4\cdot B\cdot N_u{}^3+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u{}^2-4\cdot B\cdot N_u{}^2-4\cdot B\cdot C\cdot N_u\right)}-A\cdot C^2\cdot N_u-B\cdot C\cdot N_u\cdot\left(C-4\cdot N_u\right)}\right]^2}}$$

$$Den := \frac{C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u{}^2-4\cdot B\cdot N_u{}^2-4\cdot B\cdot C\cdot N_u\right)}}{\sqrt{\left[C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u{}^2-4\cdot B\cdot N_u{}^2-4\cdot B\cdot C\cdot N_u\right)}\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{4\cdot A\cdot N_u{}^3+4\cdot B\cdot N_u{}^3+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u{}^2-B\cdot C^2-A\cdot C^2\ \ldots\right.}}\ \ldots\ -C\cdot\sqrt{N_u\cdot(A+B)}\right]\cdot\sqrt{\left[\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u{}^2-B\cdot C^2-A\cdot C^2\ \ldots\right.}\right.}}{\sqrt{\left[\sqrt{4\cdot A\cdot N_u{}^3+4\cdot B\cdot N_u{}^3+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u{}^2-B\cdot C^2-A\cdot C^2\ \ldots\right.}}\ \ldots\ -C\cdot\sqrt{N_u\cdot(A+B)}\right]^2\cdot\left[\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u{}^2-B\cdot C^2-A\cdot C^2\ \ldots\right.}\right.}}=0$$

4RST10CB3R2



Unit. $AB := 1$ **Given.** $N_1 := 1.94425$ $N_2 := 1.47933$ $N_3 := .27334$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot B\cdot C\cdot N_u\right)}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot B\cdot N_u^{\,2}-4\cdot B\cdot C\cdot N_u\right)}+C\cdot\sqrt{N_u\cdot(A+B)}}{2\cdot\sqrt{N_u\cdot(A+B)}\cdot C}=0.848658$$

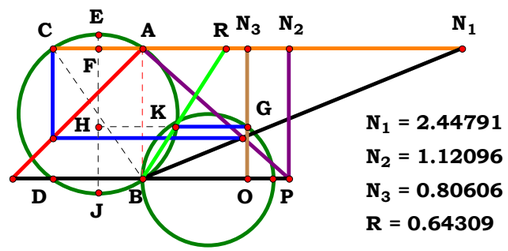
$$Num := \frac{\sqrt{N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot B\cdot C\cdot N_u\right)}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot B\cdot N_u^{\,2}-4\cdot B\cdot C\cdot N_u\right)}+C\cdot\sqrt{N_u\cdot(A+B)}}{\sqrt{\left[\sqrt{N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot B\cdot C\cdot N_u\right)}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^2+B\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot B\cdot N_u^{\,2}-4\cdot B\cdot C\cdot N_u\right)}+C\cdot\sqrt{N_u\cdot(A+B)}\right]^2}}$$

$$Den := \frac{2\cdot\sqrt{N_u\cdot(A+B)}\cdot C}{\sqrt{\left[2\cdot\sqrt{N_u\cdot(A+B)}\cdot C\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot B\cdot C\cdot N_u\right)}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot B\cdot C\cdot N_u\right)}+C\cdot\sqrt{N_u\cdot(A+B)}\right]\cdot\sqrt{C^2\cdot N_u\cdot(A+B)}}{C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{\left[\sqrt{N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot B\cdot C\cdot N_u\right)}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot B\cdot C\cdot N_u\right)}+C\cdot\sqrt{N_u\cdot(A+B)}\right]^2}}=0$$

4RST10CB3R3



$N_1 = 2.44791$
$N_2 = 1.12096$
$N_3 = 0.80606$
$R = 0.64309$

Unit. $AB := 1$ **Given.** $N_1 := 2.44791$ $N_2 := 1.12096$ $N_3 := .80606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

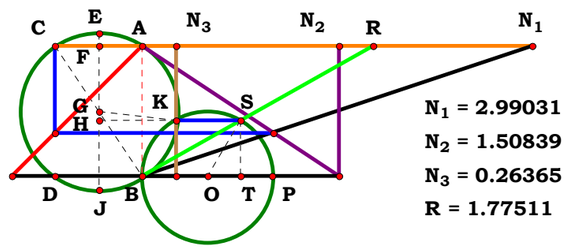
$$\frac{\sqrt{B^2\cdot\left(C-2\cdot N_u\right)^2-4\cdot A^2\cdot N_u\cdot\left(C-N_u\right)}+4\cdot C\cdot(A+B)^2\cdot\sqrt{C\cdot N_u-N_u^{\,2}}-8\cdot A\cdot B\cdot N_u\cdot\left(C-N_u\right)-B\cdot C}{2\cdot(A+B)\cdot\sqrt{N_u\cdot\left(C-N_u\right)}} = 0.643092$$

$$Num := \frac{\sqrt{B^2\cdot\left(C-2\cdot N_u\right)^2-4\cdot A^2\cdot N_u\cdot\left(C-N_u\right)}+4\cdot C\cdot(A+B)^2\cdot\sqrt{C\cdot N_u-N_u^{\,2}}-8\cdot A\cdot B\cdot N_u\cdot\left(C-N_u\right)-B\cdot C}{\sqrt{\left[\sqrt{B^2\cdot\left(C-2\cdot N_u\right)^2-4\cdot A^2\cdot N_u\cdot\left(C-N_u\right)}+4\cdot C\cdot(A+B)^2\cdot\sqrt{C\cdot N_u-N_u^{\,2}}-8\cdot A\cdot B\cdot N_u\cdot\left(C-N_u\right)-B\cdot C\right]^2}}$$

$$Den := \frac{2\cdot(A+B)\cdot\sqrt{N_u\cdot\left(C-N_u\right)}}{\sqrt{\left[2\cdot(A+B)\cdot\sqrt{N_u\cdot\left(C-N_u\right)}\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{B^2\cdot\left(C-2\cdot N_u\right)^2-4\cdot A^2\cdot N_u\cdot\left(C-N_u\right)}+4\cdot C\cdot(A+B)^2\cdot\sqrt{C\cdot N_u-N_u^{\,2}}-8\cdot A\cdot B\cdot N_u\cdot\left(C-N_u\right)-B\cdot C\right]\cdot\sqrt{N_u\cdot(2\cdot A+2\cdot B)^2\cdot\left(C-N_u\right)}}{\sqrt{\left[\sqrt{B^2\cdot\left(C-2\cdot N_u\right)^2-4\cdot A^2\cdot N_u\cdot\left(C-N_u\right)}+4\cdot C\cdot(A+B)^2\cdot\sqrt{C\cdot N_u-N_u^{\,2}}-8\cdot A\cdot B\cdot N_u\cdot\left(C-N_u\right)-B\cdot C\right]^2}\cdot(2\cdot A+2\cdot B)\cdot\sqrt{N_u\cdot\left(C-N_u\right)}} = 0$$



Unit. $AB := 1$ Given. $N_1 := 2.99031$ $N_2 := 1.50829$ $N_3 := .26365$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{N_u\cdot(A+B)}+\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A+B-4\cdot B\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}-N_u\cdot(A+B)+4\cdot N_3\cdot N_u\cdot\left[B+N_3\cdot(A+B)\right]}}{\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(A+B-4\cdot B\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}}=1.77501$$

$$Num := \frac{\sqrt{N_u\cdot(A+B)}+\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A+B-4\cdot B\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}-N_u\cdot(A+B)+4\cdot N_3\cdot N_u\cdot\left[B+N_3\cdot(A+B)\right]}}{\sqrt{\left[\sqrt{N_u\cdot(A+B)}+\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A+B-4\cdot B\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}-N_u\cdot(A+B)+4\cdot N_3\cdot N_u\cdot\left[B+N_3\cdot(A+B)\right]}\right]^2}}$$

$$Den := \frac{\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(A+B-4\cdot B\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}}{\sqrt{\left[\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(A+B-4\cdot B\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}\ \ldots\ +\sqrt{N_u\cdot(A+B)}}\right]\cdot\sqrt{\left[\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(A+B-4\cdot B\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}\right]^2}}{\sqrt{\left[\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}\ \ldots\ +\sqrt{N_u\cdot(A+B)}}\right]^2\cdot\left[\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(A+B-4\cdot B\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}\right]}}=0$$

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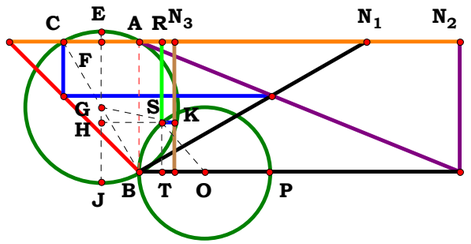

$N_1 = 1.74085$
$N_2 = 2.45760$
$N_3 = 0.27334$
$x_R = 0.17083$

Unit. $AB := 1$ **Given.** $N_1 := 1.74085$ $N_2 := 2.45760$ $N_3 := .27334$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{4\cdot A\cdot N_u^{\,3}+4\cdot B\cdot N_u^{\,3}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot A\cdot C\cdot N_u\right)}-C\cdot N_u\cdot\left(A\cdot C+B\cdot C-4\cdot A\cdot N_u\right)}}{2\cdot\sqrt{N_u\cdot(A+B)}\cdot C}=0.170846$$

$$Num := \frac{C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{4\cdot A\cdot N_u^{\,3}+4\cdot B\cdot N_u^{\,3}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot A\cdot C\cdot N_u\right)}-C\cdot N_u\cdot\left(A\cdot C+B\cdot C-4\cdot A\cdot N_u\right)}}{\sqrt{\left[C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{4\cdot A\cdot N_u^{\,3}+4\cdot B\cdot N_u^{\,3}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot A\cdot C\cdot N_u\right)}-C\cdot N_u\cdot\left(A\cdot C+B\cdot C-4\cdot A\cdot N_u\right)}\right]^2}}$$

$$Den := \frac{2\cdot\sqrt{N_u\cdot(A+B)}\cdot C}{\sqrt{\left[2\cdot\sqrt{N_u\cdot(A+B)}\cdot C\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{4\cdot A\cdot N_u^{\,3}+4\cdot B\cdot N_u^{\,3}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot A\cdot C\cdot N_u\right)}-C\cdot N_u\cdot\left(A\cdot C+B\cdot C-4\cdot A\cdot N_u\right)}\right]\cdot\sqrt{C^2\cdot N_u\cdot(A+B)}}{C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{\left[C\cdot\sqrt{N_u\cdot(A+B)}-\sqrt{4\cdot A\cdot N_u^{\,3}+4\cdot B\cdot N_u^{\,3}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u^{\,2}-B\cdot C^2-A\cdot C^2+4\cdot B\cdot N_u^{\,2}+4\cdot A\cdot C\cdot N_u\right)}-C\cdot N_u\cdot\left(A\cdot C+B\cdot C-4\cdot A\cdot N_u\right)}\right]^2}}=0$$

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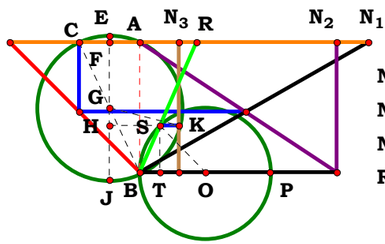


$N_1 = 1.75053$
$N_2 = 1.50839$
$N_3 = 0.30239$
$R = 0.43128$

Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := 1.50839$ $N_3 := .30239$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{N_u\cdot(A+B)}-\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A+B-4\cdot A\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}-N_u\cdot(A+B)+4\cdot N_3\cdot N_u\cdot\left(A+A\cdot N_3+B\cdot N_3\right)}}{\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(A+B-4\cdot A\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}}=0.431244$$

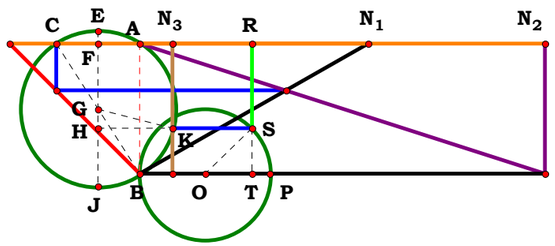
$$Num := \frac{\sqrt{N_u\cdot(A+B)}-\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A+B-4\cdot A\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}-N_u\cdot(A+B)+4\cdot N_3\cdot N_u\cdot\left(A+A\cdot N_3+B\cdot N_3\right)}}{\sqrt{\left[\sqrt{N_u\cdot(A+B)}-\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A+B-4\cdot A\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}-N_u\cdot(A+B)+4\cdot N_3\cdot N_u\cdot\left(A+A\cdot N_3+B\cdot N_3\right)}\right]^2}}$$

$$Den := \frac{\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(A+B-4\cdot A\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}}{\sqrt{\left[\sqrt{N_u\cdot(A+B)}-\sqrt{N_u\cdot\left(A+B-4\cdot A\cdot N_3-4\cdot A\cdot N_3^{\,2}-4\cdot B\cdot N_3^{\,2}\right)}\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\begin{array}{l}\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}\ \ldots}-\sqrt{N_u\cdot(A+B)}\\ +\ -N_u\cdot(A+B)+4\cdot N_3\cdot N_u\cdot\left(A+A\cdot N_3+B\cdot N_3\right)\end{array}\right]\cdot\sqrt{\left[\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}-\sqrt{N_u\cdot(A+B)}\right]^2}}{\left[\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}-\sqrt{N_u\cdot(A+B)}\right]\cdot\sqrt{\left[\begin{array}{l}\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}\ \ldots}-\sqrt{N_u\cdot(A+B)}\\ +\ -N_u\cdot(A+B)+4\cdot N_3\cdot N_u\cdot\left(A+A\cdot N_3+B\cdot N_3\right)\end{array}\right]^2}}=0$$

4RST10CB4R2



$N_1 = 1.75053$
$N_2 = 3.10654$
$N_3 = 0.25397$
$R = 0.85890$

Unit. $AB := 1$ **Given.** $N_1 := 1.75053$ $N_2 := 3.10654$ $N_3 := .25397$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

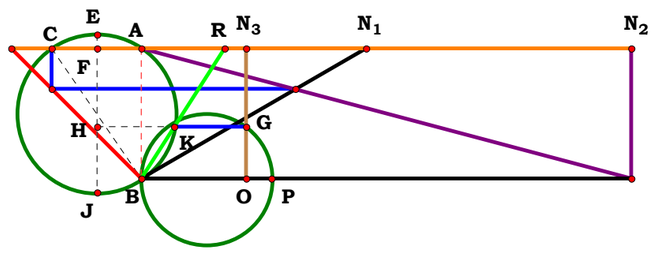
$$\frac{\sqrt{4\cdot A\cdot N_u^{3}+4\cdot B\cdot N_u^{3}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^{2}+B\cdot C^{2}-4\cdot A\cdot N_u^{2}-4\cdot B\cdot N_u^{2}-4\cdot A\cdot C\cdot N_u\right)}-A\cdot C\cdot N_u\cdot\left(C-4\cdot N_u\right)-B\cdot C^{2}\cdot N_u}+C\cdot\sqrt{N_u\cdot(A+B)}}{2\cdot\sqrt{N_u\cdot(A+B)}\cdot C}=0.858888$$

$$Num := \frac{\sqrt{4\cdot A\cdot N_u^{3}+4\cdot B\cdot N_u^{3}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^{2}+B\cdot C^{2}-4\cdot A\cdot N_u^{2}-4\cdot B\cdot N_u^{2}-4\cdot A\cdot C\cdot N_u\right)}-A\cdot C\cdot N_u\cdot\left(C-4\cdot N_u\right)-B\cdot C^{2}\cdot N_u}+C\cdot\sqrt{N_u\cdot(A+B)}}{\sqrt{\left[\sqrt{4\cdot A\cdot N_u^{3}+4\cdot B\cdot N_u^{3}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{N_u\cdot\left(A\cdot C^{2}+B\cdot C^{2}-4\cdot A\cdot N_u^{2}-4\cdot B\cdot N_u^{2}-4\cdot A\cdot C\cdot N_u\right)}-A\cdot C\cdot N_u\cdot\left(C-4\cdot N_u\right)-B\cdot C^{2}\cdot N_u}+C\cdot\sqrt{N_u\cdot(A+B)}\right]^{2}}}$$

$$Den := \frac{2\cdot\sqrt{N_u\cdot(A+B)}\cdot C}{\sqrt{\left[2\cdot\sqrt{N_u\cdot(A+B)}\cdot C\right]^{2}}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{4\cdot A\cdot N_u^{3}+4\cdot B\cdot N_u^{3}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u^{2}-B\cdot C^{2}-A\cdot C^{2}+4\cdot B\cdot N_u^{2}+4\cdot A\cdot C\cdot N_u\right)}-B\cdot C^{2}\cdot N_u-A\cdot C\cdot N_u\cdot\left(C-4\cdot N_u\right)}+C\cdot\sqrt{N_u\cdot(A+B)}\right]\cdot\sqrt{C^{2}\cdot N_u\cdot(A+B)}}{C\cdot\sqrt{\left[\sqrt{4\cdot A\cdot N_u^{3}+4\cdot B\cdot N_u^{3}+2\cdot C\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_u^{2}-B\cdot C^{2}-A\cdot C^{2}+4\cdot B\cdot N_u^{2}+4\cdot A\cdot C\cdot N_u\right)}-B\cdot C^{2}\cdot N_u-A\cdot C\cdot N_u\cdot\left(C-4\cdot N_u\right)}+C\cdot\sqrt{N_u\cdot(A+B)}\right]^{2}}\cdot\sqrt{N_u\cdot(A+B)}}=0$$



$N_1 = 1.72148$
$N_2 = 3.75549$
$N_3 = 0.80606$
$R = 0.64320$

Unit. $AB := 1$ **Given.** $N_1 := 1.72148$ $N_2 := 3.75549$ $N_3 := .80606$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{4\cdot A^2\cdot {N_u}^2 + A^2\cdot C\cdot(C-4\cdot N_u) - 4\cdot B^2\cdot N_u\cdot(C-N_u) + 4\cdot C\cdot(A+B)^2\cdot\sqrt{C\cdot N_u - {N_u}^2} - 8\cdot A\cdot B\cdot N_u\cdot(C-N_u)} - A\cdot C}{2\cdot(A+B)\cdot\sqrt{N_u\cdot(C-N_u)}} = 0.643209$$

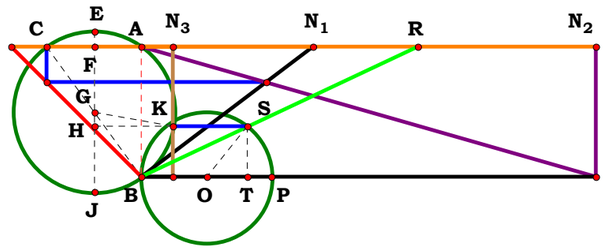
$$Num := \frac{\sqrt{4\cdot A^2\cdot {N_u}^2 + A^2\cdot C\cdot(C-4\cdot N_u) - 4\cdot B^2\cdot N_u\cdot(C-N_u) + 4\cdot C\cdot(A+B)^2\cdot\sqrt{C\cdot N_u - {N_u}^2} - 8\cdot A\cdot B\cdot N_u\cdot(C-N_u)} - A\cdot C}{\sqrt{\left[\sqrt{4\cdot A^2\cdot {N_u}^2 + A^2\cdot C\cdot(C-4\cdot N_u) - 4\cdot B^2\cdot N_u\cdot(C-N_u) + 4\cdot C\cdot(A+B)^2\cdot\sqrt{C\cdot N_u - {N_u}^2} - 8\cdot A\cdot B\cdot N_u\cdot(C-N_u)} - A\cdot C\right]^2}}$$

$$Den := \frac{2\cdot(A+B)\cdot\sqrt{N_u\cdot(C-N_u)}}{\sqrt{\left[2\cdot(A+B)\cdot\sqrt{N_u\cdot(C-N_u)}\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{4\cdot A^2\cdot {N_u}^2 + A^2\cdot C\cdot(C-4\cdot N_u) - 4\cdot B^2\cdot N_u\cdot(C-N_u) + 4\cdot C\cdot(A+B)^2\cdot\sqrt{C\cdot N_u - {N_u}^2} - 8\cdot A\cdot B\cdot N_u\cdot(C-N_u)} - A\cdot C\right]\cdot\sqrt{N_u\cdot(2\cdot A+2\cdot B)^2\cdot(C-N_u)}}{(2\cdot A+2\cdot B)\cdot\sqrt{N_u\cdot(C-N_u)}\cdot\sqrt{\left[\sqrt{4\cdot A^2\cdot {N_u}^2 + A^2\cdot C\cdot(C-4\cdot N_u) - 4\cdot B^2\cdot N_u\cdot(C-N_u) + 4\cdot C\cdot(A+B)^2\cdot\sqrt{C\cdot N_u - {N_u}^2} - 8\cdot A\cdot B\cdot N_u\cdot(C-N_u)} - A\cdot C\right]^2}} = 0$$

4RST10CB4R4



$N_1 = 1.31467$
$N_2 = 3.48429$
$N_3 = 0.24428$
$R = 2.11761$

Unit. $AB := 1$ Given. $N_1 := 1.31467$ $N_2 := 3.48429$ $N_3 := .24428$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{N_u\cdot(A+B)}+\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}-N_u\cdot(A+B)+4\cdot N_3\cdot N_u\cdot\left(A+A\cdot N_3+B\cdot N_3\right)}}{\sqrt{N_u\cdot(A+B)}-\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}}=2.117603$$

$$Num := \frac{\sqrt{N_u\cdot(A+B)}+\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}-N_u\cdot(A+B)+4\cdot N_3\cdot N_u\cdot\left(A+A\cdot N_3+B\cdot N_3\right)}}{\sqrt{\left[\sqrt{N_u\cdot(A+B)}+\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}-N_u\cdot(A+B)+4\cdot N_3\cdot N_u\cdot\left(A+A\cdot N_3+B\cdot N_3\right)}\right]^2}}$$

$$Den := \frac{\sqrt{N_u\cdot(A+B)}-\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}}{\sqrt{\left[\sqrt{N_u\cdot(A+B)}-\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}\ \ldots\ +\sqrt{N_u\cdot(A+B)}}\right]\cdot\sqrt{\left[\sqrt{N_u\cdot(A+B)}-\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}\right]^2}}{\left[\sqrt{N_u\cdot(A+B)}-\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}\right]\cdot\sqrt{\left[\sqrt{2\cdot\sqrt{N_u\cdot(A+B)}\cdot\sqrt{-N_u\cdot\left(4\cdot A\cdot N_3-B-A+4\cdot A\cdot N_3^{\,2}+4\cdot B\cdot N_3^{\,2}\right)}\ \ldots\ +\sqrt{N_u\cdot(A+B)}}\right]^2}}=0$$

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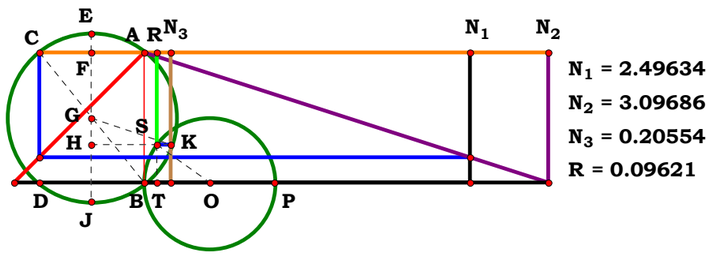

Unit. $AB := 1$ **Given.** $N_1 := 2.49634$ $N_2 := 3.09686$ $N_3 := .20554$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}}{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C}=0.096218$$

$$\text{Num} := \frac{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}}{\sqrt{\left[C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}\right]^2}}$$

$$\text{Den} := \frac{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C}{\sqrt{\left[2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C\right]^2}} \qquad L := \frac{\text{Num}}{\text{Den}}$$

$\text{Num} = 1$ $\text{Den} = 1$ $L = 1$

$$L-\frac{\left[C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}\right]\cdot\sqrt{C^2\cdot N_u\cdot(A\cdot B)^{\frac{3}{2}}}}{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot\sqrt{\left[C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}\right]^2}}=0$$

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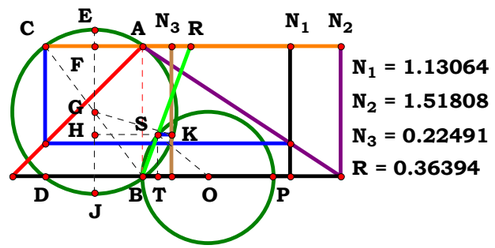

Unit. $AB := 1$ **Given.** $N_1 := 1.13064$ $N_2 := 1.51808$ $N_3 := .22491$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}}{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}=0.363945$$

$$Num := \frac{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}}{\sqrt{\left[C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}\right]^2}}$$

$$Den := \frac{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}{\sqrt{\left[(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{\sqrt{A\cdot B}\cdot\left[\sqrt{B}\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}-C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\right]^2}\cdot\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\ \ldots\right.}\right.}{(A\cdot B)^{\frac{1}{4}}\cdot\sqrt{\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\ \ldots\right.}\right.}$$

$$\left.\left.+\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]-C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]$$

$$\left.\left.+\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]-C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2\cdot\left[\sqrt{B}\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}-C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\right]}=0$$

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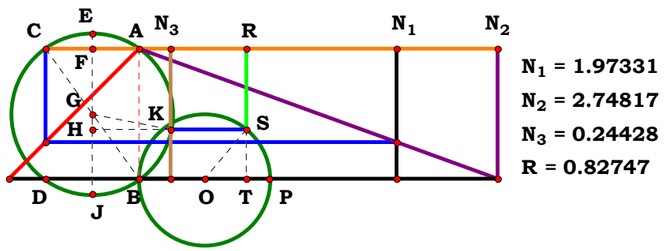


Unit. $AB := 1$ **Given.** $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := .24428$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

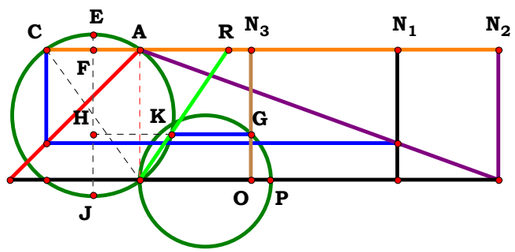
$$\frac{\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot B\cdot C\cdot N_u-4\cdot A\cdot N_u^{\,2}\right)}-\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(A\cdot C^2-4\cdot B\cdot C\cdot N_u-4\cdot A\cdot N_u^{\,2}\right)\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C}=0.827471$$

$$Num := \frac{\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot B\cdot C\cdot N_u-4\cdot A\cdot N_u^{\,2}\right)}-\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(A\cdot C^2-4\cdot B\cdot C\cdot N_u-4\cdot A\cdot N_u^{\,2}\right)\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{\sqrt{\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot B\cdot C\cdot N_u-4\cdot A\cdot N_u^{\,2}\right)}-\sqrt{A\cdot B}\cdot\sqrt{N_u}\cdot\left(A\cdot C^2-4\cdot B\cdot C\cdot N_u-4\cdot A\cdot N_u^{\,2}\right)\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}}$$

$$Den := \frac{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C}{\sqrt{\left[2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^{\,2}\right)+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^{\,2}\right)}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]\cdot\sqrt{C^2\cdot N_u\cdot(A\cdot B)^{\frac{3}{2}}}}{C\cdot\sqrt{N_u}\cdot\sqrt{\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\sqrt{N_u}\cdot\sqrt{A\cdot B}\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^{\,2}\right)+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^{\,2}\right)}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}\cdot(A\cdot B)^{\frac{3}{4}}}=0$$



$N_1 = 1.97331$
$N_2 = 2.74817$
$N_3 = 0.85448$
$R = 0.67671$

Unit. $AB := 1$ **Given.** $N_1 := 1.97331$ $N_2 := 2.74817$ $N_3 := .85448$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot {N_u}^2 - 4 \cdot A^2 \cdot C \cdot N_u + 4 \cdot A^2 \cdot C \cdot \sqrt{N_u \cdot (C - N_u)}} - B \cdot C}{2 \cdot A \cdot \sqrt{N_u \cdot (C - N_u)}} = 0.6767$$

$$Num := \frac{\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot {N_u}^2 - 4 \cdot A^2 \cdot C \cdot N_u + 4 \cdot A^2 \cdot C \cdot \sqrt{N_u \cdot (C - N_u)}} - B \cdot C}{\sqrt{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot {N_u}^2 - 4 \cdot A^2 \cdot C \cdot N_u + 4 \cdot A^2 \cdot C \cdot \sqrt{N_u \cdot (C - N_u)}} - B \cdot C\right]^2}}$$

$$Den := \frac{2 \cdot A \cdot \sqrt{N_u \cdot (C - N_u)}}{\sqrt{\left[2 \cdot A \cdot \sqrt{N_u \cdot (C - N_u)}\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L - \frac{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot {N_u}^2 - 4 \cdot A^2 \cdot C \cdot N_u + 4 \cdot A^2 \cdot C \cdot \sqrt{N_u \cdot (C - N_u)}} - B \cdot C\right] \cdot \sqrt{A^2 \cdot N_u \cdot (C - N_u)}}{A \cdot \sqrt{N_u \cdot (C - N_u)} \cdot \sqrt{\left[\sqrt{B^2 \cdot C^2 + 4 \cdot A^2 \cdot {N_u}^2 - 4 \cdot A^2 \cdot C \cdot N_u + 4 \cdot A^2 \cdot C \cdot \sqrt{N_u \cdot (C - N_u)}} - B \cdot C\right]^2}} = 0$$

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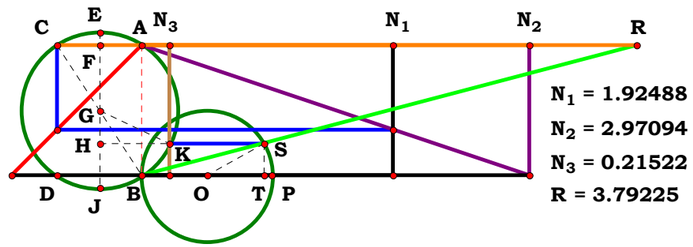

Unit. $AB := 1$ Given. $N_1 := 1.92488$ $N_2 := 2.97094$ $N_3 := .21522$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}=3.792343$$

$$Num := \frac{\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{\sqrt{\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}}$$

$$Den := \frac{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}{\sqrt{\left[(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\sqrt{\sqrt{A\cdot B}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]^2}\cdot\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\ \ldots\right.\right.}\right.$$
$$\left.\left.+\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]$$
$$(A\cdot B)^{\frac{1}{4}}\cdot\sqrt{\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\ \ldots\right.\right.}\right.$$
$$\left.\left.+\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{-N_u\cdot\left(4\cdot B\cdot C\cdot N_u-A\cdot C^2+4\cdot A\cdot N_u^2\right)}\right]}=0$$

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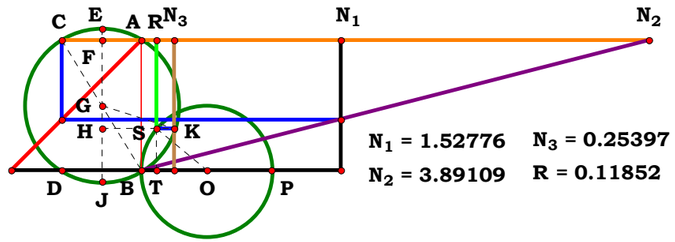

Unit. $AB := 1$ **Given.** $N_1 := 1.52776$ $N_2 := 3.89109$ $N_3 := .25397$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\ \ldots\\ +\ 4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}}{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C}=0.118531$$

$$Den := \frac{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C}{\sqrt{\left[2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C\right]^2}}$$

$$Num := \frac{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\ \ldots\\ +\ 4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}}{\sqrt{\left[C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\ \ldots\\ +\ 4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}\right]^2}}$$

$L := \frac{Num}{Den}$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\ \ldots\\ +\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}+4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}\right]\cdot\sqrt{C^2\cdot N_u\cdot(A\cdot B)^{\frac{3}{2}}}}{C\cdot\sqrt{N_u}\cdot\sqrt{\left[C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\ \ldots\\ +\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}+4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}\right]^2}\cdot(A\cdot B)^{\frac{3}{4}}}=0$$

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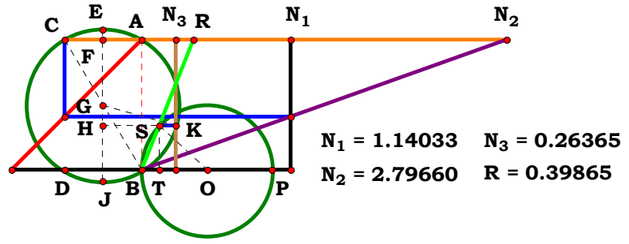

Unit. $AB := 1$ **Given.** $N_1 := 1.14033$ $N_2 := 2.79660$ $N_3 := .26365$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot {N_u}^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot {N_u}^2-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\ \ldots\\ +\ 4\cdot A\cdot C\cdot {N_u}^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot {N_u}^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}}{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot {N_u}^2-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\right]}=0.398638$$

$$\mathrm{Num} := C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}-\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot {N_u}^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\ \ldots\\ +\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot {N_u}^2-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}+4\cdot A\cdot C\cdot {N_u}^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot {N_u}^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}$$

$$\mathrm{Den} := \frac{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot {N_u}^2-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\right]}{\sqrt{\left[\begin{array}{l}(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot {N_u}^2-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\right]\end{array}\right]^2}}$$

$$L := \frac{\mathrm{Num}}{\mathrm{Den}}$$

Num = 1 Den = 1 L = 1

$$L - \frac{\sqrt{\left[\begin{matrix}\sqrt{B}\cdot\sqrt{N_u\cdot\left(A\cdot C^2 - 4\cdot A\cdot N_u^{\,2} - 4\cdot A\cdot C\cdot N_u + 4\cdot B\cdot C\cdot N_u\right)}\ \ldots \\ +\ -C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\end{matrix}\right]^2}\cdot\sqrt{A\cdot B}\cdot\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{matrix}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B} - A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\ \ldots \\ +\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2 - 4\cdot A\cdot N_u^{\,2} - 4\cdot A\cdot C\cdot N_u + 4\cdot B\cdot C\cdot N_u\right)}\ \ldots \\ +\ 4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B} - 4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{matrix}\right]} - C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]}{\left[\begin{matrix}\sqrt{B}\cdot\sqrt{N_u\cdot\left(A\cdot C^2 - 4\cdot A\cdot N_u^{\,2} - 4\cdot A\cdot C\cdot N_u + 4\cdot B\cdot C\cdot N_u\right)}\ \ldots \\ +\ -C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\end{matrix}\right]\cdot\sqrt{\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{matrix}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B} - A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\ \ldots \\ +\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2 - 4\cdot A\cdot N_u^{\,2} - 4\cdot A\cdot C\cdot N_u + 4\cdot B\cdot C\cdot N_u\right)}\ \ldots \\ +\ 4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B} - 4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{matrix}\right]} - C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}\cdot(A\cdot B)^{\frac{1}{4}}} = 0$$

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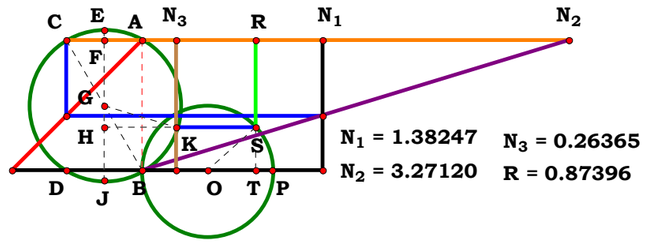

Unit. $AB := 1$ Given. $N_1 := 1.38247$ $N_2 := 3.27130$ $N_3 := .26365$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\ \ldots\\ +\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}+4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C}=0.873958$$

$$Den := \frac{2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C}{\sqrt{\left[2\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\cdot C\right]^2}}$$

$$Num := \frac{\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\ \ldots\\ +\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}+4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{\sqrt{\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\ \ldots\\ +\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}+4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}}$$

$$L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\ \ldots\\ +\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}+4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]\cdot\sqrt{C^2\cdot N_u\cdot(A\cdot B)^{\frac{3}{2}}}}{C\cdot\sqrt{N_u}\cdot\sqrt{\left[\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\ \ldots\\ +\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}+4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}\cdot(A\cdot B)^{\frac{3}{4}}}=0$$

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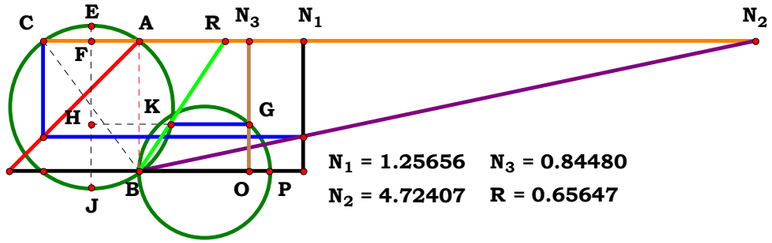

Unit. $AB := 1$ Given. $N_1 := 1.25656$ $N_2 := 4.72407$ $N_3 := .84480$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{A^2\cdot C^2+B^2\cdot C^2+4\cdot A^2\cdot {N_u}^2-2\cdot A\cdot B\cdot C^2-4\cdot A^2\cdot C\cdot N_u+4\cdot A^2\cdot C\cdot\sqrt{N_u\cdot(C-N_u)}}-C\cdot(A-B)}{2\cdot A\cdot\sqrt{N_u\cdot(C-N_u)}}=0.656473$$

$$Num := \frac{\sqrt{A^2\cdot C^2+B^2\cdot C^2+4\cdot A^2\cdot {N_u}^2-2\cdot A\cdot B\cdot C^2-4\cdot A^2\cdot C\cdot N_u+4\cdot A^2\cdot C\cdot\sqrt{N_u\cdot(C-N_u)}}-C\cdot(A-B)}{\sqrt{\left[\sqrt{A^2\cdot C^2+B^2\cdot C^2+4\cdot A^2\cdot {N_u}^2-2\cdot A\cdot B\cdot C^2-4\cdot A^2\cdot C\cdot N_u+4\cdot A^2\cdot C\cdot\sqrt{N_u\cdot(C-N_u)}}-C\cdot(A-B)\right]^2}}$$

$$Den := \frac{2\cdot A\cdot\sqrt{N_u\cdot(C-N_u)}}{\sqrt{\left[2\cdot A\cdot\sqrt{N_u\cdot(C-N_u)}\right]^2}} \qquad L := \frac{Num}{Den}$$

$Num = 1$ $Den = 1$ $L = 1$

$$L-\frac{\left[\sqrt{A^2\cdot C^2+B^2\cdot C^2+4\cdot A^2\cdot {N_u}^2-2\cdot A\cdot B\cdot C^2-4\cdot A^2\cdot C\cdot N_u+4\cdot A^2\cdot C\cdot\sqrt{N_u\cdot(C-N_u)}}-C\cdot(A-B)\right]\cdot\sqrt{A^2\cdot N_u\cdot(C-N_u)}}{A\cdot\sqrt{\left[\sqrt{A^2\cdot C^2+B^2\cdot C^2+4\cdot A^2\cdot {N_u}^2-2\cdot A\cdot B\cdot C^2-4\cdot A^2\cdot C\cdot N_u+4\cdot A^2\cdot C\cdot\sqrt{N_u\cdot(C-N_u)}}-C\cdot(A-B)\right]^2}\cdot\sqrt{N_u\cdot(C-N_u)}}=0$$

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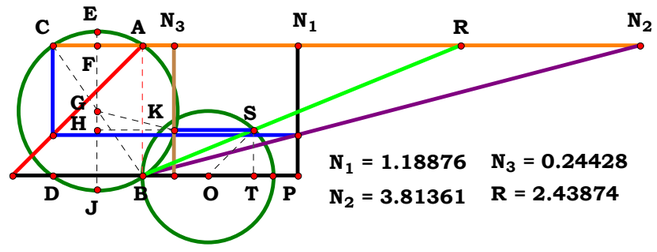

Unit. $AB := 1$ **Given.** $N_1 := 1.18876$ $N_2 := 3.81361$ $N_3 := .24428$

$N_u := 3$ $A := \frac{N_u}{N_1}$ $B := \frac{N_u}{N_2}$ $C := \frac{N_u}{N_3}$

Descriptions.

$$\frac{\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\ \ldots\\ +\ 4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}{(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\right]}=2.438738$$

$$Num := \sqrt{\sqrt{B}\cdot\sqrt{\sqrt{N_u}\cdot\left[\begin{array}{l}4\cdot A\cdot N_u^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}+2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\ \ldots\\ +\ 4\cdot A\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{array}\right]}+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}}$$

$$Den := \sqrt{\left[(A\cdot B)^{\frac{1}{4}}\cdot\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u^{\,2}-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\right]\right]^2}$$

$$L := \frac{Num}{Den}$$

Num = 1 **Den = 1** **L = 1**

$$L - \frac{\sqrt{\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{N_u\cdot\left(\begin{matrix}A\cdot C^2-4\cdot A\cdot N_u{}^2\ \ldots\\ +\ -4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\end{matrix}\right)}\right]^2\cdot\sqrt{A\cdot B}}\cdot\left[\sqrt{B}\cdot\sqrt{N_u}\cdot\left[\begin{matrix}4\cdot A\cdot N_u{}^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\ \ldots\\ +\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u{}^2-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\ \ldots\\ +\ 4\cdot A\cdot C\cdot N_u{}^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u{}^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{matrix}\right]+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]}{\left[C\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}-\sqrt{B}\cdot\sqrt{N_u\cdot\left(\begin{matrix}A\cdot C^2-4\cdot A\cdot N_u{}^2\ \ldots\\ +\ -4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\end{matrix}\right)}\right]\cdot\sqrt{\left[\sqrt{B}\cdot\sqrt{N_u}\cdot\left[\begin{matrix}4\cdot A\cdot N_u{}^{\frac{5}{2}}\cdot\sqrt{A\cdot B}-A\cdot C^2\cdot\sqrt{N_u}\cdot\sqrt{A\cdot B}\ \ldots\\ +\ 2\cdot A\cdot\sqrt{B}\cdot C\cdot\sqrt{N_u\cdot\left(A\cdot C^2-4\cdot A\cdot N_u{}^2-4\cdot A\cdot C\cdot N_u+4\cdot B\cdot C\cdot N_u\right)}\ \ldots\\ +\ 4\cdot A\cdot C\cdot N_u{}^{\frac{3}{2}}\cdot\sqrt{A\cdot B}-4\cdot B\cdot C\cdot N_u{}^{\frac{3}{2}}\cdot\sqrt{A\cdot B}\end{matrix}\right]+C\cdot\sqrt{N_u}\cdot(A\cdot B)^{\frac{3}{4}}\right]^2}\cdot(A\cdot B)^{\frac{1}{4}}} = 0$$